Glossary

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(eds. and orgs.)
Glossary
Acrodynia: a children’s disease, almost exclusively caused by mercury poisoning, also known as erythredema, acrodynic erythema, pink disease, Swift’s disease or dermatopolyneuritis. It is manifested through limb, thorax and nose erythema, polynieuritis and gastrointestinal conditions. According to Ferreira (1999), acrodynia also presents circulatory (arterial hypertension, tachycardia) and neurological (hypomotility, pains in the hands and feet, apathy, photophobia) phenomena. In 1926 it was defined as a disease characterized by a painful “tingling” caused by deteriorated cereals and other foods (D’Elia).
Sources: D’Elia, 1926; Ferreira, 1999; Stedman, 1979.

Adenitis: the swelling of a gland or of the lymphatic ganglia (a small organ disposed in chains or masses, especially in the neck, armpits and groins, where lymphocytes concentrate and which accompanies the path of a lymphatic vase). According to D’Elia (1926), this swelling caused discontinuity of the skin, allowing the invasion of infectious germs which, penetrating the lymphatic vessels, ended up by occupying a gland, thus determining its suppuration.

Agar: mucilagenous polysaccharide, also known as agar-agar or gelosis, used to give a gelatinous consistency to culture media for microorganisms and to foods, cosmetics, pharmaceutical products, dry-cell batteries, etc. It is derived from a red alga found in tropical Asian and Australian coasts, especially Java and Sri Lanka. By the end of the 1880’s, agar began to be imported by Europeans to supply the needs of bacteriologists, who were starting to use it as a medium for microbial cultures. In the 1920’s, it was also employed as excipient of several pharmaceutical formulae.
Sources: Houaiss, 2001; Stedman, 1979.

Anasarca: Pathologically, it is a generalized edema due to the infiltration of serous liquid into the
subcutaneous cellular tissue of the entire body. According to D’Elia (1926), this state may originate from a cold, without constituting an organic disease, frequently appearing in the course of erysipelas, in the period of desquamation of measles and scarlet fever. It constantly occurs in albuminuria or Bright’s disease and in the last stage of heart diseases. Anasarca is also defined as the result of diseases ending up in cachexia, rendering the blood poor and debilitating the body. The skin becomes shiny, almost always cold and with a milky aspect. Treatment consists of the use of diuretics, sudoriferous, purgatives and a milk diet. In the field of veterinary, anasarca is a disease of horses, generally caused by infection and characterized by edemas which are reabsorbed in the sub-acute form and progressive in the hyper-acute form. The disease also occurs in dogs, pigs, oxen and sheep.


Anastomosis: name originally given to the communication between two nerves, when it was believed that they were channels through which a nervous fluid ran. In general anatomy, the term is employed to designate the natural, direct or indirect, communication between two blood vessels, between two channels of the same nature, two nerves, or two muscular fibers. In pathology, it names the morbid junction or joining of two normally separated spaces or organs.

Sources: Houaiss, 2001; Littré & Gilbert, 190

Anhydrosis: absence or diminution of perspiration.

Sources: Houaiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908.

Arning, Edward Christian: the son of a German merchant established in England, Arning was born in Manchester on June 9, 1855. Sent to Hamburg at the age of twelve, he entered Gymnasium Johanneum, where he remained until 1874. In the two following years, he attended the University of Heidelberg as student of medicine, obtaining his MD at the University of Strasbourg in 1879. He began his career as a gynecologist in Berlin, but soon dedicated himself to dermatology and venereology, becoming a member of the Dermatological Institute of Breslau in 1881. Two years later, Humboldt Institute, linked to the Prussian Royal Academy of Sciences, commissioned him to make studies on leprosy in Hawaii and carry out ethnographic investigations that might bring new materials for the collections of that Prussian institution. Arning arrived in Honolulu on November 8, 1883 and organized a laboratory within the Branch Leper Hospital, in Kakaako. Two episodes of great repercussion have marked his stay in that archipelago. The first was the experiment made with Keanu, a Hawaiian who had his death sentence commuted to perpetual prison under the condition of authorizing the inoculation of leprous material in his organism. Twenty five months after the experiment, in October 1885, he showed characteristic spots of nodular leprosy over the entire body. His nerves and lymphatic glands near the place of inoculation were also affected. The second episode regarding Arning was the examination and diagnosis of leprosy in the Belgian catholic priest Joseph Damien de Veuster, who, however, did not want to be treated by the English doctor of the Kakaako Hospital. Divergences with Walter M. Gibson, Minister of Foreign Relations.
and president of the *Board of Health* of the Hawaiian Kingdom, led Arning to abandon the archipelago in the middle of 1887. In Hamburg he continued his activities of dermatologist, becoming professor of that specialty in the local university. Edward Christian Arning died in Munich on August 21, 1936.

Sources: Tronca, 2000; www.204.

**Aspidosperma**: A genus of tropical trees and (rarely) bushes, of the family Apocynaceae, native of the tropical regions of the Americas, with 80 species, mostly from South America, some are used for timber, many for their alkaloid and antimicrobian. With alternate leaves, small flowers, follicular fruit and peltate seeds with paper-like wings, they produce wood for industry, such as the trees called in Brazil *peroba-rosa* and *pau-cetim*. The dried bark of *Aspidosperma quebracho-blanco* contains the active principle of quebracho, employed to stimulate respiration, in the treatment of asthma and cardiac dyspnea.

(See Aspidospermine; Quebracho).


**Aspidospermine** \[C_{22}H_{30}N_{2}O_{2}\]: pentacyclic indolic alkaloid found in plants of the genus *Aspidosperma*, having antithermal, irritating and vomitive action.

(See Aspidosperma).

Sources: Cardenal, 1960; Ferreira, 1999; Stedman, 1979.

**Asthma**: According to Stedman (1979), the term was originally used to designate “difficult respiration”, but nowadays it designates bronchial asthma. Other meanings such as cardiac asthma, renal asthma etc. have been rejected. It thus refers to a condition of the lungs in which there is the narrowing of the air passages due to different degrees of contraction (spasm) of the smooth musculature, edema of the mucous membranes and mucus in the light of bronchi and bronchioles, those alterations provoked by the liberation, in the course of the allergic process, of spasmogenics and vasoactive substances (histamine or a substance of slow anaphylactic reaction, for instance). Crises of hissing paroxystic dyspnea occur, accompanied by edemas and hyper-secretion of the mucous membranes of air passages, due to the sudden contraction of the muscles commanding the opening and closing of bronchi. Those spells are followed by coughing and sensation of constriction, generally occurring by night and persisting for hours, sometimes for days and weeks. The commonest type of asthma is the allergic bronchial one, caused by a specific reaction to common substances as dust, pollen, mites etc. Asthmatic attacks often occur after periods on intensive exercise or emotional tension, or associated to nose and throat infections, or yet to a climatic change. Most asthmatics have periodical attacks all year round. Severe asthma is the most obnoxious of respiratory asthmases and the one that may incapacitate the patient, rendering difficult the assiduity at work. Treatment of the disease involves the isolated or simultaneous use of adrenaline, aminophylline and ephedrine, and of ACTH (adrenocorticotropic hormone) and cortisone, during severer attacks. In the chronic phase, physicians try to identify the infectious and allergic factors to render the patient less sensible to them.

(See Symptomatic asthma).

Atheroma: a very common lesion in the advanced phase of arteriosclerosis, formed by a fibrous and fatty plaque situated in the intima (tissue serving as cover to an anatomical structure). A source from Lutz’s times (D’Elia, 1926) defined it as “retention tumor”, characterized by the obstruction of an evacuation channel of a hair follicle, “with the participation of sebaceous glands” that pour into the follicle. Excessive food and endocrine disturbances may favor the appearance of atheroma.


Atropin [C17H23NO3]: a crystalline alkaloid medicine extracted from plants of the family Solanaceae (Atropa) as, for instance, belladonna, employed as obstructive agent of the physiological action of acetylcholine (neurotransmitter molecule acting over the passage of a nervous impulse from the cells of the nervous system to those of the muscles), as anti-spasthic and dilator of the pupil. As it is extremely toxic, it can only be ingested in minimal doses of 0.001 to 0.003g, mostly as atropin sulphate. Higher quantities may provoke an excited state known as “atropinic delirium”, whose symptoms are the blockade of the vegetative nervous system, agitation of the central nervous systems accompanied by hallucinations, depression, difficulty of ingestion, dessication of the mucous membranes, tachycardia, etc. It may even evolve to death.


Azevedo Lima, José Jerônimo de:
Brazilian doctor born in Campos (RJ) in 1840, died in 1912. In 1879 he entered Hospital dos Lázanos, in Rio de Janeiro, where he headed the clinical service for many years. By his suggestion, a laboratory for anatomic, pathological and bacteriological studies related to leprosy was created in that institution in 1893. Upon his retirement he was substituted by João Pizarro Gabizo, chairman of dermatology at the Rio de Janeiro Faculty of Medicine. In “A leprous no Brasil” (Leprosy in Brazil) – a work sent to the First International Conference on Leprology, held in Berlin in October 1897, but not printed in its annals – Azevedo Lima manifested himself favorably to the theory of contagiousness of that disease in healthy persons in a “state of morbid receptivity”.

Sources: Lello, 1942; Souza Araújo, 1956.
Bacilli: common designation for cylinder- or rod-shaped bacteria belonging to the genus *Bacillus*. Its species, generally motile, are Gram-positive, aerobic or, under certain conditions, anaerobic. Generally found in earth and water, they do not produce their own food and feed upon other organisms. Bacilli have as one of their main characteristics the formation of dormant spores under adverse environmental conditions. Such endospores remain viable in nature, especially in the soil, for long time periods, as they are resistant to heat, chemical substances and sunlight. The typical species of the genus *Bacillus* is *Bacillus subtilis*. Described in 1872 by Ferdinand Cohn (1828-1898), it is the commonest agent of contamination of laboratory cultures, being frequently found in human skin. Among the few pathogenic species is to be mentioned *Bacillus anthracis*, causative of anthrax in man and domestic animals. Other species, such as *Bacillus cereus*, are often responsible for damages to preserved food. Some antibiotics used in medicine are produced from those microorganisms, such as bacitracin (*Bacillus subtilis*) and polymyxin (*Bacillus polymyxa*). (See Bacteria).

Sources: Encyclopædia Britannica, 2001; Houaiss, 2001; Stedman, 1979. See Bacteria.

Bacteria: bacteria are a part of the Kingdom Monera, together with blue algae or Cyanophyceae, a group including unicellular and procariont (a single cell devoid of nucleus) beings. In Adolphe Lutz’s time, bacteria were generally divided into four groups, according to morphological criteria: the rod-shaped ones were called bacilli; those in the shape of bent rods, vibrio; the spiral-shaped ones, spirilli; a special type of spirilli were the spirochetes. The rounded bacteria won the name of cocci, which could be grouped into colonies: two cocci formed a diplococcus; four, a tetrad; cocci in a chain were called streptococci; two cocci in the shape of the flame of a candle, united by the base and in opposite directions, were named
pneumococci. Nowadays bacteria are classified according to new criteria: biochemical reactions, chemical composition, cellular structure, and, under the light of molecular biology, according to their genetic and immunological characteristics. Many bacteria cause diseases in plants, in men and in other animals. Certain bacteria cause severe poisoning: botulism, when badly canned food or ill-preserved food is ingested; and salmonellosis, caused by the ingestion of contaminated food. Free-living or parasitic microorganisms, bacteria are also essential to the process of decomposition of organic matter in the body, in the soil or other media. Up to the beginning of the 20th century, bacteria were practically synonyms of microorganisms, the former word being therefore frequently applied to designate any living organisms of microscopic dimensions. The so-called “bacteriological era” began with Luis Pasteur (1822-1895) and Robert Koch (1843-1920), but sources from the beginning of the last quarter of the 19th century indicate that there were many controversies regarding the taxonomic position of bacteria; in the 20th century they were qualified as a group of lower plants or as belonging to the algal family, as a part of the Schizomycetes group. (See Schizomycetes; Fungi).

Sources: Houaiss, 2001; Koogan-Houaiss, 2004; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Murray, 1910; www.31; www.32.

Bary, Heinrich Anton de: German botanist born in Frankfurt on January 26, 1831 and died in Strasbourg on January 19, 1888. He received his doctorate in medicine at the Berlin University in 1853, and became known by his studies on algae, myxomycetes and, above all, fungi which granted him the epithet of founder of modern mycology. Principally interested in the reproduction, sexuality, morphology and physiology of fungi, he affirmed in his first and prestigious book, Untersuchungen über Die Brandpilze und die durch sie verursachten Krankheiten der Pflanzen mit Rücksicht auf das Getreide und andere Nutzpflanzen (1853), that those organisms were the causative agent of many diseases of plants, and not mere excrescences of them, as it was thought. With his deep knowledge of the cycle and parasitic characteristics of fungi, de Bary was one of the first to study the parasite-host interactions, having effected valuable researches on potato late blight, corn stalk rust, barley and oat rusts. The creator of many terms utilized in studies about fungi and lichens – heteroic, sporidium, saprophytes, facultative parasites, symbiosis, etc. – a sizable part of the classification he developed remain valid in the researches of modern mycologists. From his scarce studies on bacteria resulted the discovery of the spores of Bacillus magaterrium and the proof that cyanobacteria were not algae, a contribution resulting into the removal of bacteria from the Kingdom Fungi. Dedicated to teaching, de Bary lectured botany at the Universities of Tübingen (1854), Freiburg (1855-1869), Halle (1867-1872) and Strasbourg (1872-1888), having been the first Dean of the latter (1872).

Sources: Encyclopædia Britannica, 2001; Moura, 2002.

Baunscheidtism: therapeutic method developed by Karl Baunscheidt, mechanic and carriages builder born in Endenich, near Bonn (1809-1874). His therapy consisted of the superficial introduction of a small bundle of needles into the skin, followed by the rubbing of pierced areas with croton oil.
or other irritative substance. The objective was to make the diagnosis and cure diseases through the purulent cutaneous eruption, which rapidly got better. Baunscheidtism is a bastard version of acupuncture, therapeutic technique originally practiced by the Chinese and Japanese, based on the correspondence of certain organs to determined cutaneous areas. These points are united by imaginary lines, called meridians. Acupuncture is mostly indicated for functional disturbances and several painful manifestations.


Beurmann, Charles Lucien de: French doctor (1851-1923) who described Beurmann’s disease, the disseminated gummy form of sporotrichosis, Beurmann obtained his MD in Paris. In 1889, he became head of service of Lourcine Hospital, going afterwards to Saint-Louis Hospital, where he remained until 1916. The numerous trips he undertook to other countries, notably to Persia, India and Japan, gave him the opportunity to study the so-called exotic diseases, in particular leprosy and tropical syphilis. Beurmann distinguished himself, in a special way, by his contributions to the knowledge of sporotrichosis, made in collaboration with his disciples Louis Ramond and Henri Gougerot. With the latter he published, in 1912, Les sporotrichoses (Paris, F. Alcan), and, with Gougerot and Vaucher, papers on Mycoderma cutaneum.

(See Sporotrichosis).

Sources: Stedman, 1979; www.55.

Biermer, Michael Anton: German doctor (1827-1892), after whom Addison-Biermer’s disease was named. It is also known as Addison-Biermer’s anemia, Biermer-Ehrlich’s anemia, Hunter-Addison’s anemia, Lebert’s essential anemia, progressive pernicious anemia, Biermer’s disease, Biermer’s anemia and yet macrocytic achylic anemia. Its evolution, formerly fatal, gave place to a benign prognostic after the advent of vitamin B12 (cyanocobalamina), used as intramuscular injections. The cause of the disease is the insufficient absorption of that vitamin due to the lack of a factor produced by the normal gastric mucous membrane. It is thus believed that it results from a defect in the stomach, with atrophy or lack of this “intrinsic” factor. The disease is a kind of progressive chronic anemia occurring in higher frequency in patients 50 years old or more, in adults and old people of both genders. It is manifested through numbness and tingling, weakness, a sensible and smooth tongue, dizziness, skin and mucous membranes pallor, anorexia, diarrhea, loss of weight, digestive, and often neurological disturbances. Laboratory studies in general have revealed a great decrease of hematimetry, low levels of hemoglobin, numerous macrocytic erythrocytes, associated to a preponderant number of megaloblasts and relatively few normoblasts in the bone marrow; blood leucometry in peripheral blood may be lower than normal, with relatively multisegmented lymphocytes and neutrophiles. James Scarth Combe (1796-1883) related a case of pernicious anemia in 1822. Other descriptions of isolated cases were made by Sir Thomas Addison and Hermann Lebert in 1849, but Michael Anton Biermer was the author of its classical description, in 1868-1872. Afterwards, Paul Ehrlich (1854-1915) distinguished the aplastic type of anemia.

Sources: Larousse, 1971; Stedman, 1979; www.70.
Bizzozero, Giulio: member of the Viennese Institute for the History of Medicine. Giulio Bizzozero (Varese, 1846 – Turin, 1901) was professor of general medicine at Turin University, transforming it into one of the most important medical centers of Europe. Edoardo Bassini, a surgeon who perfected the operation of inguinal hernia (Bassini’s operation), Carlo Forlanini who introduced pneumothorax as a treatment procedure for pulmonary tuberculosis, and Antonio Carle and Giorgio Rattone, who demonstrated the transmissibility of tetanus, studied or worked in his laboratory. Bizzozero also produced papers in the areas of histology and public health, malaria and tuberculosis control. His most important papers dwelt with the discovery of blood platelets and their role in haemostasy, as well as with the identification of the bone marrow as a center of cellular production.


Blastomycetes: a group of pathogenic fungi developed, like yeasts, through budding. In artificial media they sometimes produce mycelia and conidia. In the past, Blastomycetes and Saccharomycetes were considered synonymous, but nowadays the former are classified among the Moniliares. Blastomyces dermatidis, agent of the North American blastomycosis, and Paracoccidioides brasiliensis, causative agent of the South American blastomycosis, belong to the Moniliares. (See North American blastomycosis; South American blastomycosis).

Sources: Larousse, 1971; Stedman, 1979.

Blastomycosis: term designating several infectious diseases attacking men and other animals. They are produced by the development of fungi of diverse species, like Blastomyces dermatidis and Paracoccidioides brasiliensis. (See European blastomycosis; North American blastomycosis; South American blastomycosis; Mycosis).

Sources: Houaiss, 2001; Stedman, 1979.

Boeck, Carl Wilhelm: Norwegian doctor, born in Königsberg on December 15, 1808. After attending Christiania Kathedralskole and Mollers Institut, he studied medicine at the University of Christiania, graduating on October 12, 1831. Among his medical activities, are to be mentioned his studies about skin diseases and syphilis. Boeck inaugurated his dermatological clinic in 1850. There, two years later, he began treating lues by means of syphilization. This method, developed by Joseph Alexandre Auzias-Turenne (1812-1870) from experiments with animals, found in the Norwegian doctor an ardent defender. It basically consisted in repeated inoculations with material extracted from initial cutaneous lesions provoked by syphilis, up to the point when the procedure would not produce any reaction. As regards leprosy, are to be mentioned the researches undertaken by Boeck together with Daniel Cornelius Danielssen (1815-1894), resulting in the eponym Danielssen-Boeck’s disease, a form of leprosy characterized by hyperesthesia followed by anesthesia, ulceration, gangrene and mutilation. In the end of the 1860’s, Boeck traveled to America to study the prevalence of that disease among Norwegian immigrants. Professor of surgery, skin diseases and syphilis in the Kongelige Frederiks Universitet from 1846 on, he was
named Full Professor of medicine in the same institution in 1851. He died in Christiania (now Oslo) on December 10, 1875, one year after joining the skin department of Rikshospitalet, the Norwegian national research hospital. (See Danielssen, Daniel Cornelius; Leprosy).

Sources: www.230.

Breda, Achille: Italian dermatologist (1850-1947), who was a student of Ferdinand von Hebra, member of the Viennese Institute for the History of Medicine, and president of Istituto Veneto di Scienze, Lettere ed Arti in the period from 1926 to 1928. He studied yaws, which, for this reason, are also known as Breda’s disease. (See Yaws).

Sources: Cardenal, 1947; www.14; www.15.

Brocq, Louis-Anne-Jean: French dermatologist born in the city of Laroque-Timbaut on the first day of February, 1856. He finished his medical course in 1878, receiving his MD degree in 1892, in Paris. He continued his studies under Jean Alfred Fournier (1832-1915), Jean Baptiste Emile Vidal (1825-1893) and Ernest Henri Besnier (1831-1909). In 1891, he became the doctor of Hospice La Rochefoucauld and, five years afterwards, of Broca Hospital, where, with a lot of effort, he established a department of dermatological research. From 1906 up to his retirement in 1921 he worked at Saint-Louis Hospital, the institution in which he developed intense teaching activities. A leader of the French dermatological school of his time, Brocq was member of the Medical Academy and author of the first treaty of dermatology in the French language, Pratique dermatologique. He lent his name to a large number of infirmities, among them Brocq-Duhring (or Duhring-Brocqj) disease and Brocq-Pautrier syndrome. He died in Paris, on December 18, 1928. (See Duhring, Louis Adolphus, Duhring’s disease).

Sources: www.123.

Buschke, Abraham: German dermatologist (1868-1943) who studied at Breslau, Greifswald and Berlin, obtaining his MD in Berlin in 1891. He became Full Professor at Friedrich-Wilhelm University, in Berlin, in 1908, and Extraordinary (Ausserördentlich) Professor in 1920, and retired in 1933. He was assistant professor at the surgical clinic headed by Heinrich Helferich (1851-1945) in Greifswald, at the dermatological clinic of Albert Neisser (1855-1916) in Breslau and also in that of Edmund Lesser (1852-1918) in Berlin. In 1904 he was named head of the Department of Dermatology at the Urban-Krankenhaus and, from 1906 on, was head of dermatology of Rudolf-Virchow Hospital, with 400 beds destined to patients with dermatological diseases. That vast clinical experience was the basis for the publication of numerous articles. Venereal diseases were one of Buschke’s main areas of interest, notably syphilis and gonorrhea. A victim of the nazis, he and his wife were incarcerated at the concentration camp of Theresienstadt (Terezin), in northern Bohemia (Czechoslovakia), where he died of inanition in 1943. (See European blastomycosis; Cryptococcosis; Cryptococcus neoformans).

Sources: www.16; www.18.

Busse, Otto: German doctor that was born in Gühlitz in 1867 and died in Zurich, Switzerland, in 1922. He obtained his MD in Greifswald (Germany) in 1892. Ten years later, in
that same city, he became assistant professor at the Pathological Institute, under the orientation of Paul Otto Grawitz. In 1904, Busse became head of the Department of Pathologic Anatomy of the Institute of Hygiene in Posen. Afterwards, in 1911, he became professor of pathologic anatomy in Zurich. Busse is especially known for his investigations on pathogenic fungi, having published *Die Hefen als Krankheitserreger* (Yeast as pathogenic fungi) in Berlin, 1897. He studied European blastomycosis, also known, for this reason, as Busse-Buschke’s disease. (See European blastomycosis; Cryptococcosis; *Cryptococcus neoformans*).

Sources: www.25; www.55.
Cachexy: nowadays, it has the meaning of extreme degree of frailness or general lack of nutrition and wearing, occurring during a chronic disease or emotional disturbance. In Cardenal (1947) it is defined as a state of deep and progressive constitutional distress originating from various causes; according to Murray (1910), the term was used to characterize patients suffering from malignant tumors or unwholesome states caused by syphilis, dysentery and other chronic diseases (malaria, for instance, in the so-called swamp cachexy). Individuals in that condition become anemic and debilitated, the skin wrinkled, loosing its elasticity and showing a yellowish taint; and there is loss or alteration of appetite. The Encyclopædia Britannica (2001) indicates that, in the 1990’s, the efficacy of the treatment of cachexy with thalidomide was discovered in patients with diseases such as Aids, tuberculosis and leprosy, and that cachexy would apparently be caused by the overproduction of TNF (tumor necrosis factor) by the body. TNF is a protein naturally produced by the phagocytary cells of human organism, which may encircle and destroy bacteria, viruses and other foreign substances.

Sources: Cardenal, 1947; Cardenal, 1960; Dorland, 1947; Encyclopædia Britannica, 2001; Littré & Gilbert, 1908; Murray, 1910.

Carbolic Acid \([\text{C}_6\text{H}_5\text{OH}]\): acid generally known as phenol, and also as phenilic alcohol or phenic acid. It occurs in the shape of colourless crystals that become liquefied with the addition of water. It functions as local caustic in concentrated form and as anesthetic in 3-4% solutions. If swallowed, it is powerfully corrosive (olive oil is recommended as antidote). It is used as antiseptic and disinfectant for sanitary and surgical purposes.

Sources: Hawley, 1950; Houaiss, 2001; Murray, 1910; Stedman, 1979.

Carcinoma: any of the several types of malignant neoplasias related to the epithelial tissue, thus opposed to sarcomas, conjunctive cankerous...
tumors. In both genders it occurs mainly in the skin and the large intestine; in men, in the bronchi, stomach or prostate; in women, in the breast and cervix. Carcinomas are histologically identified by their invasive capacity and by alterations indicating anaplasia, i.e., loss of nuclei polarity, loss of the ordered maturation of cells, variation in the latter’s size and form, accumulation of chromatin in the nuclei and increase in nucleocytoplasmic reactions. Carcinomas may be differentiated or be similar to one of the types of normal epithelium. They tend to invade neighboring tissues, originating metastases.


Cardol: a vesicant, irritating, yellow, oily liquid extracted from the pericarp of the cashew-nut, a fruit found in trees and shrubs of the species *Anacardium occidentale*. By the end of the 19th century, some physicians recommended its external use in cases of leprosy and severe cutaneous ulcers. Taken internally, it was employed as vermifuge, not showing vesicant action upon the digestive tube. Cardol is still used to designate a substance obtained by the chemical combination of a solution of brome or sodium hypobromide with a solution of salol. Also known as tribromsalol – an insipid, colorless, crystalline powder, insoluble in water, difficulty soluble in alcohol, acetic acid or chloroform – it was indicated, in the past, as an intestinal antiseptic, hypnotic, analgesic and haemostatic drug.

Sources: Cardenal, 1960; Dorland, 1947; Littré & Gilbert, 1908.

Caustic potash, KOH: the same as potassium hydroxide. A white salt, soluble in water, that melts at 360ºC. A very caustic, strong base, it corrodes organic tissues. It is prepared by electrolysis of dissolved potassium, being employed to absorb carbonic acid in the fabrication of soap and in the removal of ink from paintings and as analytic reagent. It was a part of the composition of Viennese powder, being externally used for the cauterization of chancres and cysts.


Chaulmoogric acid \([C_{18}H_{32}O_2]\): non-saturated fat acid, with colorless and crystalline appearance, soluble in alcohol, found among the products resulting from the hydrolysis of the chaulmoogra oil glycerids. In 1904, the chemist and pharmacologist Frederick B. Power, at the head of the Wellcome Chemical Research Laboratories, undertook experiments with chaulmoogra seeds coming from the species *Taraktogenos kurzii* (afterwards called *Hydnocarpus kurzii*). Power and his collaborators removed the seeds’ skin, pressed the nuts and extracted a type of oil that was submitted to chemical procedures, as well as the mass resulting from the pressing of the seeds. They were able to isolate several compounds, among them chaulmoogric acid. They also performed experiments with seeds from the species *Hydnocarpus wightiana*, *Hydnocarpus anthelmintica* and *Gynocardia odorata* belonging to the same order as *Taraktogenos kurzii*. From the first two species they obtained an inferior homologous acid, called hydnocarpic acid, whose formula is \(C_{16}H_{28}O_2\). From *Gynocardia odorata* they were not able to extract the so-called chalmoogra oil, nor the chaulmoogric and hydnocarpic acids.
Chalmoogra oil: a yellow oil extracted from seeds of *Taraktogenos kurzii* (family Bixaceae). It contains chalmugric, gynocardic and hidnocarpic acids. For many centuries used in the East for treating leprosy and other skin diseases, chalmoogra oil was incorporated into western medicine only in the 1800’s, when the British doctor Frederic John Mouat, from the Medical College Hospital of Calcutta, started employing it. Originally, the oil was ingested or topically applied over the leprous areas of the body. Although oral administration was more efficient, it caused intense nausea in patients. To diminish the adverse reactions, Isadore Dyer, from the Louisiana Leper Home, in Carville, in 1901, began to use chalmoogra oil pills. Later on, other physicians tried to encapsulate the substance or even to add water to diminish nausea, but without success. A little before, in the middle of the 1890’s, the oil started to be administered by means of intramuscular and subcutaneous injections. This method attenuated nausea but it was painful and produced strong local reaction and fever. Around 1913, Victor Heiser and Elidoro Mercado, from the San Lazaro Hospital in Manila, tried hypodermic injections containing chalmoogra and a solution of camphor and resorcin, to facilitate absorption of the substance. Still in the 1910’s, some derivates from chalmoogra oil began to be used, as gynocardic acid and ethyl esters. In the 1940’s, they were gradually substituted, not without resistance, by sulphone and its derivates in the treatment of Saint Lazarus’ disease. However, the toxicity of those antibiotics, allied to the high cost of their utilization *en masse*, sustained the use of chalmoogra oil, as the main therapy and as a complement of the new therapies for a few more years still. In 1953, a committee of specialists from the World Health Organization uniformly sanctioned the superiority of sulphones in the treatment of hanseniasis, sanction corroborated by the Sixth International Leprosy Congress, held in Madrid in the same year. During the 19th century it was believed that chalmoogra oil was extracted from seeds of *Gynocardia odorata*. Such a mistake was probably due to the studies of William Roxburgh, surgeon and naturalist, the first (or one of the first ones) to describe, in the Western World, the medicament and its use against leprosy. In his plant catalogue published in 1815, Roxburgh erroneously identified as seeds of *Gynocardia odorata* the seeds coming from the *kalaw*, a tree indicated in Birmanian and Indian folklore as capable of curing leprosy. It was only in 1901 that David Prain related chalmoogra seeds sold in Calcutta with the true species, *Taraktogenos kurzii*. Experiments made by Frederick B. Power, in 1904, showed that *Gynocardia odorata* did not produce chalmoogra oil. The first Ayurvedic texts written in southern India also associated the chalmoogra to the species afterwards called *Hydnocarpus wightiana* (family Flacourtiaceae). (See Chaulmoogric acid; Leprosy).

Chancroid: similar to chancre, but possessing a lesser degree of malignancy. A term also used to characterize an epithelioma (tumor of epithelial nature) with tendency to harden, also referent to a malignant neoplasy (for instance, basal cell carcinoma and others). The term
*chancroid* is also used as synonym of the disease known as soft chancre. (See Soft chancre).


**Charcot, Jean-Martin**: French doctor born in Paris on November 29, 1825, in a family originated from Champagne. Considered the forerunner of modern nervous pathology, it was the first professor of this subject, assuming in 1872 the chair of the Faculty of Medicine of the University of Paris. He was also one the founders of the famous neurological clinic, La Salpêtrière (saltpetre quarry), a hospital thus called because it was inaugurated in a building that used to be Louis XIII’s armament and gunpowder warehouse. Charcot’s name is linked to a great number of discoveries, notably in the area of studies of the nervous system. His experiments with hypnosis for the investigation of hysteria attracted an enormous quantity of students to his classes. Among those of his disciples who became famous were Desiré-Magloire Bourneville, Joseph Jules Babinski, Pierre Marie and Sigmund Freud, who used the technique of hypnosis to investigate the psychological origins of neurosis. Charcot became interested in Parkinson’s disease, the amyotrophic lateral sclerosis – known as “Charcot’s disease” –, poliomyelitis and the tabes; he established the difference between hysterical and epileptic convulsions and the motor role of the ascendant frontal circumvolution of the brain. Jean-Martin Charcot was also vice-president of the Society of Biology (1860), member of the Academy of Medicine (1872), of the Academy of Sciences (1883) and of various other scientific societies. From 1890 on, his health began to fail and he suffered several attacks of angina. He died suddenly, during an attack of pulmonary aedema, on August 16, 1893, at Lac des Settons, Nièvre. (See Charcot’s Crystals).

Sources: D’Elia, 1926; Larousse, 1971; Larousse, 1998; www.87; www.118.

**Charcot’s crystals**: collections of octaedric crystals formed by the protein of the membrane of an eosinophile, a granulocyte which stabilizes and preserves acid dyes and is associated to defensive and inflammatory processes of the organism. They are found in the spittle of individuals with asthmatic bronchitis, in the facies of patients with ulcerative colitis and in the blood of leukaemics. Friedrich Albert von Zenker (1825-1898) was the first to observe those crystals in 1851; two years afterwards they were concomitantly described by Jean-Martin Charcot and Charles-Philippe Robin (1821-1885). In 1872, Ernst Viktor von Leyden (1832-1910) studied them, and for this reason they are also called Charcot-Leyden crystals. Other denominations are Charcot-Robin crystals, asthma crystals and Arthus (Nicolas Maurice Arthus, 1862-1945) crystals. (See Charcot, Jean-Martin).

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Sources: D’Elia, 1926; Larousse, 1971; www.87; www.118.

Chlorosis: anaemic affection that seems commoner among young women, evidenced by greenish-yellow tainted skin and associated to disturbances of menstruation or generalized discouragement. It was called Morbus virginum in the Middle Ages (a concept inherited from Hippocrates), later Morbus amatorium and Febris alba virginica. Also known as chlorotic anaemia, chloranaemia and chloremia.

Sources: Larousse, 1971; Houaiss, 2001; Murray, 1910.

Chondrome: a benign tumor or growth, similar to the tumor of mesodermic cells that form cartilage.

Sources: Houaiss, 2001; Stedman, 1979.

Chrysarobin: a mixture of substances found in “angelim-araroba” (Vataireopsis araroba), a native tree of Brazil, which produces pink flowers and ovoid pods; by grinding the bark, which envelops its high quality wood, the araroba-powder is produced. Also known as Goa-powder extract, chrysarobin is a complex mixture of products resulting from the reduction of chrysophanic acid, emodin and monomethyl ether of emodin. It was used as antiseptic and purgative, being also efficacious in the treatment of psoriasis, eczemas, skin diseases, especially those of parasitic character, as pityriasis versicolor, tinea tonsurans and eczema marganatum.

Sources: Dorland, 1947; Houaiss, 2001; Stedman, 1979; www.64.

Cocainum muriaticum \([\text{C}_17\text{H}_21\text{NO}_4\text{HCl}]\): or cocaine hydrochloryde. Chemical compound obtained from a treatment of coca paste, extracted from the leaves of the plant Erythroxylum coca, with chlorhydric acid. It presents itself in the shape of colorless crystals or white crystalline powder. Soluble in water and alcohol, insoluble in ether, it may constitute a poisonous drug and cause dependence. The alkaloid cocaine was isolated for the first time in 1859 by the German doctor Albert Niemann (1834-1861), from Göttingen University. Only in 1880, the anesthetic properties were recognized by the Russian Vassili von Anrep, from the University of Würzburg. Initially utilized as local anesthetics during ophthalmic surgeries, cocaine chlorohydrate gained the support of medical doctors by the end of the 19th and beginning of the 20th centuries. Enthusiastic with the studies of Theodor Aschenbrandt, who had described the increase of physical resistance in Bavarian soldiers, during military manoeuvres, caused by that substance, the young neurologist Sigmund Freud (1856-1930) affirmed that regular small doses could be very successful in the treatment of depression and indigestion. In that time, cocaine was freely commercialized for medicinal use, being also administered as tonic, under the form of suppositories and expectorating pills.

Coccidioidomycosis: a disease caused by fungi of the species *Coccidioides immitis*, also known as Posadas’ disease, Posadas-Wernicke’s disease, Posadas’ mycosis, Posadas-Rixford’s disease, Wernicke-Posadas’ disease, coccidioidal granulome, California disease or yet desert rheumatism, San Joaquin fever, San Joaquin Valley fever or valley fever. It is caused by dust particles containing the arthroconidium of *Coccidioides immitis*, a fungus thriving in certain regions of the United States and Mexico (Arizona, New Mexico, western Texas and the San Joaquin Valley in California), in the lower part of the Sonoran Desert (covering the areas of southwestern Arizona, southeast California, and most of Baja California and western Sonora), in parts of Central America and Argentina. Natural disasters such as wind storms and earthquakes contribute to the appearance of the disease. Endemic areas are restricted to desert or semi-desert areas similar to those of northeastern Brazil, where some cases have also been reported. Farmers and soil laborers are more susceptible to the disease, for they have a greater probability of inhaling spores of *Coccidioides immitis*. A large part of individuals with the primary acute form do not show symptoms. When these occur, they begin to appear from one to three weeks after infection. Some individuals present the so-called desert rheumatism, a condition characterized by conjunctivitis, arthritis and nodular erythema. The disease occurs under the primary acute form, that is, as a slight pulmonary infection that disappears without treatment, or under the progressive form, as a severe infection that is disseminated through the entire body (bones, liver, spleen, kidneys, brain and meninges). In this case it is frequently fatal. Individuals with the progressive form are treated with antymycotic substances (amphotericin B intravenously or fluconazol orally). Up to now, the transmission from animals to men nor from men to men has not been recorded. The disease was initially diagnosed in Argentina by Robert Johann Wernicke and Alejandro Posadas in 1892. These physicians published independent papers describing the initial cadre of a fungoid mycosis with psorosperms. Surgeon Emmet Rixford observed another case of the disease in 1893; new cases were registered in California in 1894 and 1896, when the fungus was isolated from desert soil in San Joaquin Valley. The organism that causes the disease was named *Coccidioides immitis* and definitely characterized by William Ophüls and H. C. Moffit (1871-1933) in “A new pathogenic mould formerly described as a protozoan: *Coccidioides immitis pyogenes*: preliminary report”, *Philadelphia Medical Journal*, 1900, n.5, p.1471-2. (See Psorospermosis; South America blastomycosis).


*Coccidium*: a genus of protozoans that parasite vertebrates and invertebrates. An unicellular being devoid of special organelles of locomotion, it attacks the intestinal epithelium, blood cells and other cells of the host. It forms a part of the Phylum Apicomplexa, one of the subdivisions of the Kingdom Protista, which includes other parasitic species to animals, whose life cycles include spore-or-cyst-forming stages. (See Psorosperms; Psorospermosis).

Collodium: a heavy, colorless liquid obtained from the dissolution of pyroxilline, or gun-cotton, in ether and alcohol. When spread over a surface, this viscous liquid forms a protective film after the evaporation of the solvent, explaining the expression “sublimated collodium” employed by Adolpho Lutz. It is used as a vehicle for local application of medicinal substances, to dress wounds, burns and ulcers, to avoid the occurrence of infection, and as a protector of slides, in the fabrication of covers impervious to air and special filters for the study of viruses.


Condurango [Eagle vine]: designation common to certain species of climbing trees native of Central and South America. The bark of the species Gonolobus condurango, also known as Marsdenia condurango (family Asclepiadaceae), was used, in the past, in the treatment of cancer. The species of condurango native of Brazil, belonging to the family Vitaceae, Vitis sulcicaulis – popularly known as chupão, cipó-d’água, cipó-mãe-boa, mãe-boa – has a sarmentose stem, potable sap, astringent leaves, greenish flowers and edible fruit in the shape of an ovoid and black pod, with seeds.

Sources: Cardenal, 1960; Ferreira, 1999; Grant, 1944; Houaiss, 2001; Stedman, 1979.

Condyloma: designation of several types of sexually transmissible, cutaneous or mucous membranes’ lesions caused by viruses or bacteria, among which are to be mentioned the flat and humid papule of secondary syphilis, also known as condyloma latum. It assumes the shape of a rounded benign tumor, of a mollusciform wart, or of a papilliform excrescence, generally occurring in the anus, the vulva, or the glans of the penis. According to Murray (1910), condylomas were commonly found in connection with humidity and irritation due to corrosive secretions, especially those resulting from venereal infections. D’Elia (1916) differentiated between flat and acuminated condylomas.


Cornil, André Victor: French doctor and politician, born in Cusset in 1837, died in 1908, in Menton (France). Representative, professor of the Parisian Faculty of Medicine, he was the author of papers on histology and bacteriology. In 1875, he wrote a report about the use of aniline dyes to recognize the amyloids, glicoproteic substances occurring as extra-cellular pathological deposits below the endothelium of capillaries or sinusoids, on the walls of small arteries and in several organs. With a metachromatic staining method based upon methyl-violet, Cornil was able to recognize the extra-cellular nature of these abnormal formations. In collaboration with Victor Babes (1854-1926), he published, in 1885, Les bactéries et leur rôle dans l’anatomie et l’histologie pathologiques des maladies infectieuses (Bacteria and their relation to the pathological anatomy and histology of infectious diseases), a handbook of histopathology considered one of the landmarks of medicine in the 1800’s.

Sources: Larrousse, 1971; www.26; www.27; www.28.

Corrosive sublimate: the same as mercury chloride, mercury bichloride, mercury perchloride, corrosive mercury chloride. It is a caustic, toxic, inodorous, crystalline, white salt that was still used in the 1940’s as anti-syphilitic drug, in
doses of 0.005 to 0.02 grams, per day, in solution, pills or subcutaneous injections. For external use, as antiseptic and parasiticide, it was prepared in solutions of one-quarter to 1 per 1000. Another source from the same time qualified corrosive sublimate as a component of Van Gieson’s method of staining and of Zenker’s liquid, a chemical compound used in the fixation of histological pieces. Murray (1910) related cases of poisoning by corrosive sublimate; although different opinions existed then as to the obnoxious or inoffensive qualities of the metal mercury when ingested, this author considered poisonous its soluble and volatile compounds, including the vapors of metallic mercury. In cases of acute poisoning by corrosive sublimate, the recommended antidote was albumin or albuminoids in any soluble form and the ingestion of milk and egg white the fastest possible. Due to the powerful local action of the poison in the stomach, stomach lavage was useless, but if vomit occurred naturally an emetic could be administered. The rest of the treatment consisted in alleviating pain through opiates, and thirst through demulcent drinks.

(See Guayacol).
Sources: Cardenal, 1947; Fernandes, 1943; Koogan-Houaiss, 2004; Murray, 1910; www.11; www.137; www.95.

**Creosote**: an oily, volatile, pyrogenic liquid with a pungent odor, obtained from the distillation of pitch from the wood of certain plant species. Constituted by a mixture of several phenols (principally methylguayacol, guayacol and creosol), it is soluble in water, alcohol, ether or chloroform. It was used in medicine as antiseptic, local anesthetic and caustic. It was also used as an expectorant and against dental caries.

(See Guayacol).
Sources: Grant, 1944; Houaiss, 2001; Koogan-Houaiss, 2004; Stedman, 1979.

**Croococaceae**: a designation common to the Cyanophyceae (“blue algae”) of the Order Chroococcales. They are constituted by simple, independent cells not differentiated at the base or apex. They multiply by simple cellular division and may, afterwards, remain united in colonies with a characteristic blade-like spherical shape. They include benthonic or planctonic species, some of them aerophytic, others forming part of lichens.

**Croupous pneumonia**: acute infectious disease caused by pneumococci. Characterized by fever, pains at inspirations, cough and ferrugineous or bloody spittle. It generally lasts for nine days, ending by a crisis with abundant perspiration. It affects one or more pulmonary lobes, for that reason also being called lobular pneumonia. The same as acute pneumonia, pneumococcic pneumonia, pleural pneumonia, pleuritic pneumonia and fibrinous pneumonia.
(See Pneumonia).

**Crudeli, Corrado Tommasi**: Italian doctor born in Tuscany in 1834, died in 1900. Disciple of Rudolph Virchow (1891-1902), Tommasi Crudeli is mostly known as one of the first cytologists of the 19th century, founder of two faculties of medicine in Italy, of the National Institute of Hygiene in Rome and a hospital in Sicily. He was also the author of the first sanitary reform of unified Italy. Professor of pathological anatomy in
In Rome, he described, in 1879, with the German bacteriologist Edwin Klebs, *Bacillus malariae*, a microorganism found by them in the soil of the Roman countryside, which they considered the causative agent of malaria. Found in moist soil and in the air of low heights, it could be cultivated in fish gelatin. According to the two researchers, the injection of soil infected with such a microorganism in rabbits produced malarial fever and spleen dilatation, reactions distinct from those noted in experiments with soil from malaria-free regions. It is also said that they would have verified that humans submitted to an injection of pure culture of *Bacillus malariae* developed the characteristic symptoms of the disease. (See Klebs, Edwin).

**Crural hernia:** the term hernia designates the total or partial shifting of one or more organs or anatomical formations from their normal site to another through the wall of the cavity containing them, or through a pathological orifice or yet an orifice that became pathological. Crural hernia, also known as femoral hernia, is the protrusion of abdominal or pelvic viscera through the crural channel, a fibrous conduct which, in Scarpa’s triangle, contains the femoral vessels. It may be small and asymptomatic, or with slight symptoms and then complicated in virtue of imprisonment or strangulation. The treatment, therefore, is necessarily surgical. As it is an affection accessible to touching, and easily detectable, knowledge about hernias dates back to Antiquity. They are mentioned in Ebers papyrus, 1500 b. C., and represented in very ancient Greek terra cotta pieces. In the first century a. C., Celsus performed several operations of inguinal hernia. In 1869 Joseph Lister practiced the first operation of a strangled hernia using antiseptic principles. The anatomical bases for the development of this type of surgery were established by Antonio Scarpa (1748-1832), Julius Germain Cloquet (1790-1883), Antonio de Gimbernat (1742-1790), Sir Astley Paston Cooper (1768-1841), Franz Kaspar Hesselbach (1759-1816) and, especially, by Eduardo Bassini (1844-1929).

**Cryptococcosis:** known in the past as European blastomycosis, Buschke’s disease, or yet Busse-Buschke’s disease, it was also called torulosis, because its causative agent had as a synonym the name “histolytic torula”. It is an acute, subacute or chronic infection related to a pulmonary, systemic or meningeal mycosis. The agent is *Cryptococcus neoformans*, an encapsulated yeast existing everywhere and which is generally inhaled. The primary pulmonary infection is frequently asymptomatic and may remain in the lung or develop into a chronic form with lesions in other organs of the body. Cryptococcosis is considered an opportunistic infection, as it mainly affects individuals suffering from immunodepression. The genus *Cryptococcus* comprises 37 species, but the greatest human pathogen is *C. neoformans*. Medical literature registers very few cases of cryptococcosis caused by other species (*C. albidus* and *C. laurentii*). The disease was described for the first time by Otto Busse and Abraham Buschke in Germany, in 1893. They at first recognized a tumor in the leg of a 31 year old female patient, but as pus was extracted from the bone lesion, doctors were able to identify the parasite in
microscopic examinations and in cultures, hence resulting the identification of the first case of cryptococcosis. The disease has already been sporadically observed in all domestic mammals, but it occurs especially in cats and dogs; in a few instances it has been reported in horses. It may cause the appearance of tumoral masses of mucoid aspect or lesions without increase of volume, but of a gelatinous consistence, in any part of the organism, with a marked preference for the brain and the meninges.

Although cryptococcosis is called European blastomycosis, in 1934, Rhoda Behnam demonstrated that it is different from blastomycosis. (See Cryptococcus neoformans).


Cryptococcus neoformans: one of 37 species of the genus Cryptococcus, which reproduce by budding and do not develop spores. Cryptococcus neoformans is an encapsulated fungus measuring from 4 to 7 micrometers, enveloped by a polysaccharide capsule whose thickness varies from 1 to 30 micrometers. The main causative agent of cryptococcosis (also known as European blastomycosis or torulosis), it attacks the skin, the lungs, and, principally, the brain and its membranes. C. neoformans was first isolated from peach juice, in Italy, by Francesco Sanfelice. Almost at the same time, two German doctors, Abraham Buschke e Otto Busse, isolated the fungus from lesions having the appearance of sarcomes. Sanfelice called that cryptogamic yeast Saccharomyces neoformans; Busse called it Saccharomyces hominis. The disease caused by the fungus would be called saccharomycosis. In 1895, the French pathologist Ferdinand Curtis described that fungus as a vegetable parasite belonging to the species of yeasts causing soft tumors in tissues, some of them of a myxomatous appearance. Curtis gave to that encapsulated yeast the name Megalococcus myxoides. In 1901, the French mycologist Jean-Paul Vuillemin transferred the species to the genus Cryptococcus (Greek kryptos, occult), due to the absence of endospores. (See Cryptococcosis; Saccharomyces).

Sources: Stedman, 1979; www.17.

Cryptogramos: original designation of one of the two main groups in which Carl von Linné (1707-1778) divided Vegetable Kingdom, including algae, fungi, mosses and ferns. No longer employed as a taxonomic group, its subgroups are nowadays placed in different taxons. In common usage, however, the term may be used to designate any plant devoid of apparent sex organs, reproducing itself by means of spores or gametes instead of seeds.

Sources: Ferreira, 1999; Houaiss, 2001; www.158.

Curschmann’s spirals: helicoidal agglomerate found in the spittle of patients with asthmatic bronchitis, described by Heinrich Curschmann, from Leipzig (1846-1910).

Danielssen, Daniel Cornelius:
Norwegian doctor born on July 4, 1815, in Bergen. After graduating in medicine at Christiania University in 1839, he took specialized courses on physiology, chemistry and skin diseases, beginning his investigations on leprosy at St. Jorgens Hospital. In that institution he met Carl Wilhelm Boeck, in July 1840, and started working with him in the research of morphaea. Under the auspices of the Norwegian government, in 1847, they published *Om Spedalskhed* (On Leprosy), a reference work of modern literature about that disease. The father-in-law of Gerhard Armauer Hansen (1841-1912), Danielssen diverged from his son-in-law about leprosy transmission. As Boeck, he defended the hereditary character of the disease, what did not prevent them of investigating other possibilities of transmission. Meanwhile Hansen, the discoverer of the leprosy bacillus, remained a decided defender of its contagiousness. Danielssen died in Bergen on July 13, 1894.
(See Boeck, Carl Wilhelm; Leprosy).
Sources: www.231.

Dematiaceae: a family of Fungi Imperfecti, order Monidiales, producing simple conidiophores (hyphae in whose apex spores are formed).
(See Fungi; Hypha).
Sources: Stedman, 1979.

Dermatomycosis: skin infection produced by parasitic fungi. The same as dermatophytia.

Digitalis: common designation for herbs of the genus *Digitalis*, family Scrophulariaceae, with about 19 species, native of Europe and the region extending from the Mediterranean to Central Asia. Its flowers are shaped like glove fingers, disposed in raised bunches, hence the Latin name of the genus. The commonest species, *Digitalis purpurea*, occurring in silicic soils, has purple flowers; that of calcareous soils, yellow ones. Plants of this species are known as *Digitalis* or foxgloves, and the powder obtained from their leaves is a cardiotonic that diminishes the heart’s rhythm, regularizing and reinforcing its
contractions. Such properties are due to the glycosides that they contain (particularly digitalin). From the species *Digitalis lanata*, cardiotonics digoxin and lanatoside are extracted. Digitalic derivatives are employed in pills and drops for oral therapeutics or in injections (intramuscular or intravenous). The use of digitalin for heart diseases was introduced in 1785 by the British doctor William Withering.


*Diplococcus*: a coconut-shaped bacterium whose elements group in pairs. (See Bacteria).

Sources: D’Elia, 1926; Houaiss, 2001; Landouzy & Jayle, 1902; Litttré & Gilbert, 1908; Stedman, 1979.

**Duhring’s disease**: chronic dermatological affection characterized by severe pruriginous lesions and extensive papulo-vesicular eruptions, which principally affect elbows, scalp, knees, buttocks, nape and upper part of the back. It indistinctly affects men and women in the proportion one to every 100,000 people, being commoner among whites than in negroes and less frequent in Asians. Spontaneous cure seldom happens, except in children. The re-incidence rate of the infirmity is very high, but the treatment associating sulphones and alimentary diet devoid of gluten produces satisfactory results. Some scholars consider Duhring’s disease as a variation of the coeliac disease, whose more evident trait is the sensibility to oats, rye, corn and other cereals, in all its bearers. Also known as circinated herpetiform blister, Brocq-Duhring or Duhring-Brock’s disease, herpetiform dermatitis, multiform dermatitis ou herpetiform hydroa. (See Brocq, Louis-Anne-Jean; Duhring, Louis Adolphus).


**Duhring, Louis Adolphus**: North American dermatologist born on December 23, 1843, in Philadelphia, graduated from Pennsylvania University, where he also took his doctorate degree (1867). Before embarking to Europe (Paris, London and Vienna), where he specialized in dermatology, he worked at Bockley Hospital. In 1871, he became professor of skin diseases at Pennsylvania University. He had a very important role in the description of herpetiform dermatitis (1884) or Duhring’s disease, also studied by William Tilbury Fox and Louis-Anne-Jean Brocq (1888). He died on May 8, 1913, in Philadelphia. (See Brocq, Louis-Anne-Jean; Duhring’s disease).

Echyma: a dermatitis of erosive and ulcerating nature caused by streptococci. Commoner in undernourished individuals suffering from diabetes or with affected immunological system. It also occurs under precarious situations of hygiene or as a consequence of small traumas, under the form of unique or multiple bacterial ulcers covered by crusts with a preferential location in the legs. D’Elia (1926) reveals that the term “echyma” was employed by Ancients to designate various dermatological affections or affections of uncertain definition (furuncles, mange, etc.). Murray (1910) and Landouzy & Jayle (1902) had already employed this term in its present meaning. Sources: Cardenal, 1960; D’Elia, 1926; Dorland, 1947; Houaiss, 2001; Landouzy & Jayle, 1902; Murray, 1910; Stedman, 1979; www.94; www.130.

Eczema: general term designating an acute or chronic allergic affection of the skin, characterized by erythemas, aedemas, papulae, vesicles and inflammatory reaction with formation of crusts, followed by lichenification, descaling, and occasionally darkening of the erythema; hyperpigmentation is less frequent; but not rarely there is a sensation of itching and burning. The expressions dry dermatosis or scaly dermatosis are colloquially used as synonyms of eczema. During D’Elia’s times (1926), a microbial origin was admitted for the disease, although its producing agent had not yet been discovered; it was then considered that its development was favored by constitutional alterations (lymphatism, scrofulas in childhood, uric diathesis, and other “dyscrasies” of adult age); by hindrances of the stomach, liver and kidneys causing modifications in the chemical constitution of the blood and humors; and, probably, by the “disarrangement” of the nervous system. Very frequently, one may still read in D’Elia (1926) that the disease had as a “determinant cause” the influence of external agents (irritating chemical substances, thermal or mechanic irritations, insalubrious jobs, etc.) and local hindrances of the circulation (varices). Sources: D’Elia, 1926; Stedman, 1979.
**Efflorescence:** elementary lesion of the skin; it may be primary (purple, pigmented, vascular spots, exanthemas, papulæ, urticary plaques, tubercles, gums, tumors, vesicles, blisters, pustules) or secondary (erosions, fissures, rhagades, lichenifications, ulcerations, crusts, etc.).
Sources: Larousse, 1971.

**Eichstedt, Carl Ferdinand:** German physician (1816-1892) who, in 1846, recognized the contagious nature of *pitriasis versicolor* when, in the scales of lesions caused by that disease, identified its agent: a fungus, later called *Microsporum furfur*. Those investigations, made at the University of Greifswald, in Germany, began in 1842 and were part of the first mycological researches applied to medicine. (See Vescicular pityriasis).
Sources: www.60; www.63.

**Empyema:** Pus accumulation in any cavity of the organism, as, for instance, the pleural cavity, the bile vesicle, the cecal appendix and the maxillary antrum. When used without specification, it refers to pyothorax (pus in the pleural cavity).

**Entozoans:** several groups of helminths. In ancient classifications, a taxon encompassing several endoparasitic animals, especially intestinal worms such as flatworms, trichinae, and roundworms (*Ascaris*). Sources: D’Elia, 1926; Houaiss, 2001; Koogan-Houaiss, 2004.

**Erysipelas:** also called in Portuguese *mal-do-monte, mal-da-praia, maldita* and *esipa*, is an infectious disease generally caused by *Streptococcus pyogenes* group A, involving, in more severe cases, other types of bacteria (*Staphylococcus, Pseudomonas*). The etiological agent penetrates the organism through lesion caused by mycoses in the patient’s nails (onichomycoses) or between his toes (in Portuguese “freirea”, “pé-de-atleta”), scratches and skin boils, itching caused by insect bites, etc. The bacterium mostly thrives in the lymphatic vessels of the skin and may reach the subcutaneous cellular tissue. The agent of erysipelas was observed in the pus of deep lesions by the end of the 1870’s by Louis Pasteur in France, and Robert Koch in Germany. Pure cultures were obtained from materials extracted from the teeth of persons affected with erysipelas in 1883 by Friedrich Fehleisen (1854-1924) and the following year by Anton Julius Friedrich Rosenbach (1842-1923). It was the first demonstration of the specific germ of a surgical infection. A Viennese surgeon, Theodor Billroth (1829-1894) was the author of the name *Streptococcus*. Rosenbach gave the variety isolated from suppurative lesions the name *Streptococcus pyogenes*. The classification was improved in 1903 by Hugo Schottmüller, thanks to the technique of culture in dishes with agar and blood, developed by him. From studies made at the Rockefeller Institute for Medical Research from 1918 on, Rebecca Craighill Lancefield (1895-1981) demonstrated that group A (*S. pyogenes*) is specific to human infirmities, and that group B is associated with neonatal diseases. She also demonstrated that the great variety of serum types within the first group is due to antigen variations of a protein of the cell wall which she called protein M. *Streptococcus pyogenes* is one of the most frequent pathogens of humans. It is estimated that from 5 to 15% of individuals harbor it without showing
symptoms of any disease. When the bacterium is introduced in vulnerable tissues, several types of suppurative infection of the respiratory tract, bloodstream and the skin may occur, infections which were responsible for many deaths in Adolpho Lutz’s times. Besides being the main agent of erysipelas, *Streptococcus pyogenes* is related to puerperal fever, scarlet fever, pharingitis, tonsilitis, impetigus, cellulitis and other infections, that may result in post-streptococcic aftermaths such as acute rheumatic fever and glomerulonephritis. Patients with chronic venous insufficiency or decrease in the number of lymphatic vessels have a higher predisposition to acquire erysipelas, as is the case of women submitted to mastectomy or bearers of lymphedema. Repeated bursts of erysipelas may cause *elephantiasis nostra*, with increase of volume of the affected place due to a persistent and hard edema, the skin acquiring a verrucose aspect. Erysipelas is most commonly located in the skin of the face or in the scalp, but, according to D’Elia (1926), it may attack other parts of the body, including the meninges. It is clinically characterized by strong fever, inflammation of the skin, with heat, redness and swelling of the skin and the nearby lymphatic vessels, abundant serous sweat deposited in the skin tissue and in the subcutaneous connective tissue, ending in suppuration. Patients may show loss of appetite, agitation and pains in their joints. Treatment mainly consists of the use of penicillin and sulfas. Ancient sources attribute the disease to *Streptococcus erysipelatis*, qualified by D’Elia (1926) as a facultatively anaerobic micrococcus normally found in the air, water and soil and on the skin, mouth and duodenum. Epidemics of erysipelas, very common in the past, became rare due to the processes of sanitation and the appearance of antibiotics. However, more recently, and for reasons not yet clear, there has been a resurgence of severe infections by *Streptococcus pyogenes*, sometimes leaving serious sequels. (See *Streptococcus*).


**Erythema ou erythematous dermatitis:** skin redness due to the dilatation of the cutaneous capillary vessels for several causes. As a rule, it is temporary, and momentarily disappears under the pressure of a finger.

Sources: Ferreira, 1999; Larousse, 1971.

**Erythematous lupus:** also called lupus, systemic erythematous lupus, disseminate erythematous lupus, superficial lupus, centrifugal ulerythema, Biett’s disease, Cazenave’s disease or centrifugal erythema. A chronic inflammatory disease of the skin of spectral nature, characterized by ulcerations or spots varying according to the specific type. Of slow evolution, it provokes fever, loss of appetite, articular and cutaneous manifestations, especially spots on the face similar to butterfly wings, that may spread and reach other organs. Lupus is a self-immune infirmity: the immune system attacks the cells themselves and the healthy tissues, by reasons unknown up to day. The disease presents three main forms: the chronic one there are only cutaneous lesions; the subacute form is characterized by more disseminated cutaneous lesions and by more acute clinical and histological aspects than those observed in the chronic discoidal phase; in the systemic or disseminated form there is commitment of vital
structures. The disease attacks principally young women, from the end of adolescence to the age of 30, and affects each person in a distinct form. Studies on erythematous lupus comprise three periods. During the classic period, descriptions of the cutaneous disorders that characterize the disease were made, by Thomas Bateman (1778-1821), disciple of the English dermatologist Robert Willan, in the beginning of the 19th century; by Ferdinand von Hebra and by Pierre Louis Alphée Cazenave (disciple of the French dermatologist Laurent Theodore Biett, 1781-1840) in the middle of the same century. The lesions of the form now called discoid lupus were described in 1833 by Cazenave, who employed the expression centrifugal erythema; the butterfly-wing-shaped facial lesions were studied in 1846 by Hebra, author of the first illustrated publication about erythematous lupus and other dermatological diseases, Atlas der Hautkrankheiten (Atlas of skin diseases, 1856-1876). The neoclassic period had its beginning in 1872, when Moritz Kohn Kaposi, Hungarian dermatologist (1837-1902), son-in-law and successor to the Austrian dermatologist Ferdinand von Hebra, described the systemic nature of erythematous lupus, distinguishing the discoid and the disseminated types. In his “Neue Beiträge zur Kntniss des Lupus erythematosus” (New contributions to the knowledge of erythematous lupus, Archives of Dermatology and Syphilology, 1872, v.4, n.36), Kaposi analyzed the various symptoms characterizing the latter form: subcutaneous nodules, arthritis with hypertrophy of the large and small joints, lymphadenopathy, fever, loss of weight, anemia and involvement of the central nervous system. The works undertaken by Sir William Osler (Canadian doctor, 1849-1919, Oxford), in Baltimore (“On the visceral manifestations of the erythema group of skin diseases – third paper”, American Journal of Medical Sciences, 1904, v.127, n.1), and Josef Jadassohn (German dermatologist, 1863-1936) in Vienna (“Lupus erythematosides” in Mracek F., Ed., Handbuch der Hautkrankheiten, Wien: Alfred Holder, 1904, p.298-404), during the turn of the 19th to the 20th century, consolidated the knowledge about disseminated or systemic lupus. The modern period is inaugurated with the application of immunology to studies of erythematous lupus and the discovery, in 1947, of LE (lupus erythematosus) cells by R. J. Morton. In the following years, Malcolm McCallum Hargraves, a North American doctor, born in 1903, and his collaborators recognized those cells in the bone marrow of their patients with acute dissemination of erythematous lupus and affirmed that they were the result of phagocytosis of the free nuclear material. Other important advances in the study of lupus were the development of animal models and the recognition of the role of genetic predispositions for the development of the disease. Its prevalence amidst certain families was initially investigated by Johann Otto Leonhardt Heubner (German doctor, 1843-1926) in 1954 and later by Frank Cheryl Arnett (professor and head of internal medicine and director of the area or rheumatology at the University of Texas Medical School, in Houston), and Lawrence Edward Shulman (North American rheumatologist born in 1919), who published together “Studies in familial systemic lupus erythematosus” (Medicine, 1976, v.55, n.313). Nowadays molecular biology is revolutionizing the knowledge of the disease and it is hoped that researchers
 Ether: organic compound constituted by two hydrocarbon groups bound to the same oxygen atom. It results from the combination of an alcohol with an acid or other alcohol, with elimination of water. Under heat, sulphuric acid produces, with alcohol, sulphuric ether, also called ethyl oxyde, ethylic ether or common ether, whose formula is \( \text{(C}_2\text{H}_5\text{)}_2\text{O} \). It is a colorless liquid with characteristic odor, light and volatile, very inflammable, boiling at 34º C. The paralyzing action upon the nervous system has conferred it anesthetic properties. Ether inaugurated modern anesthetics, together with nitrogen protoxyde, when it was employed in the United States around 1840, first in dental, and then in general surgeries. Once inhaled, ether provokes an accentuated muscular relaxation and allows ample oxygenation. The inconveniences of its use are its irritant action upon respiratory ways and kidneys, as well as the increase of intracranial pressure, rendering it counter indicated in neurosurgery. It is used as solvent and for other industrial purposes.

**European blastomycosis**: name used in the past to designate cryptococcosis. (See Cryptococcosis). Fonte: www.17.
Faradization: therapy that uses electric current as inductor or stimulator of nerves and muscles. The French doctor Guillaume Benjamin Amand Duchenne, called Duchenne de Boulogne, is considered the introducer of electricity in the diagnostic and treatment of neurological affections, with whose help he described and treated progressive locomotory ataxy (tabes), progressive muscular paralyses and other pathologies of the nervous system. The term faradization derives from Michael Faraday, English physicist and chemist (1791-1867), who created the theory of electrostatic induction and discovered electromagnetic induction (1831), providing the bases for James Clerk Maxwell’s (1831-1879) theory of electromagnetism. According to D’Elia (1926), induced electric current acted in a special way upon muscular contractility and nervous excitation, giving results considered excellent in paralyses by central lesion.


Favus: mycotic infection of the scalp caused by *Trichophyton schoenleinii*, sometimes also attacking nails and glabrous regions of the skin. Characterized by the formation of small purulent crusts similar to honey-combs, in whose center is found the parasitized hair. The infected hairs are easily breakable, atrophied and fall down very easily. The disease has been known since the Middle Ages. Its best description was made by Raymond Sabouraud (1864-1938). The etiological agent was discovered by the German doctor Johann Lukas Schoenlein (1793-1864), in 1839, for this reason being called *Achorion schoenleinii* by Robert Remak (1815-1865). Later on, a new classification of the fungi places *Achorion* as a junior synonym of *Trichophyton*, a genus related to *Microsporum* and *Epidermophyton*. Also called in Portuguese “tinha favosa” or simply “favosa”.

Sources: D’Elia, 1926; Fitzpatrick, 1971; Larousse, 1971; Houaiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Stedman, 1979; Veronesi, 1982; Weitzman & Summerbell, 1995; www.159.
Foliaceous pemphigus: a peculiar form of pemphigus characterized by a vesicular cutaneous eruption accompanied by descaling, with imperceptible pustulation. A crusty superficial epidermic lesion normally appears replacing ruptured blisters. Foliaceous pemphigus was described by Pierre Louis Alphée Cazenave (1795-1877) in 1844, being for this reason, it is also known as Cazenave’s disease. Previously, two probable cases of the same infirmity had been described, the first of them by de la Motte, in 1772. (See Pemphigus).

Sources: Cardenal, 1960; D’Elia, 1926; Ferreira, 1999; Larousse, 1971; Houaiss, 2001; Littré & Gilbert, 1908; Murray, 1910; Stedman, 1979; www.187; www.188.

Fowler’s liquor, Fowler’s arsenical liquor or, yet, Fowler’s solution: a remedy conceived by the English doctor Thomas Fowler (1736-1801), constituted by arsenic acid, pure potassium carbonate (5 g), distilled water (500 g) and compound Melissa alcoholate (15 g). According to Littré & Gilbert (1908), the liquor contained the hundredth part of its weight in arsenic acid, or 0.01 grams of acid per gram of liquor. The posology was from 2 to 12 drops, several times a day. Fowler’s liquor was used as tonic and in the treatment of infectious processes and cutaneous affections such as lichen ruber and psoriasis. Up to the first decades of the 20th century it was also employed in the treatment of leukemia. (See Lichen ruber).

Sources: D’Elia, 1926; Littré & Gilbert, 1908; Paulier, 1882; www.149; www.150; www.151.

Fowler’s solution: See Fowler’s liquor.

Framboesia tropica: See Yaws.

Fuchsin $\left[\text{C}_{20}\text{H}_{20}\text{CIN}_3\right]$: a variety of rosanilin-red dye, which electively fixes itself in certain elements, rendering easier their observation. It is employed in bacteriology and histology, especially under its ammoniacal form (Gram’s method), which divides the bacteria into Gram-positive and Gram-negative, according to the greater or lesser fixation of the dye. It is also used in the textile industry for staining hides. (See Staining; Gram’s method).


Fungi: common designation for organisms belonging to the Kingdom Fungi, heterotrophic beings, especially saprophytic or parasitic, without chlorophyll, whose nutrition is effectuated by absorption. They grow in irregular masses, are devoid of roots, stem and leaves, reproducing sexually or asexually. They may exist as a simple cell, as in the case of yeasts, or form a multicellular vegetative structure called mycelium, constituted by ramified threads called hyphae. Fungi are usually encountered in moist environments or as parasites of plants, animals, and even man. The most widely known examples are molds and mushrooms. Some form are pathogenic, while others are used as food and in the production of antibiotics. During a long time fungi have been included in the group of lower plants and, in this condition, close to bacteria. By the end of the 19th century, both terms were practically considered equivalent, as well as the denominations microbe, germ and Schizomycetes. Notwithstanding this classification, fungi present a set of particular characteristics allowing their separation from plants: they do not synthesize chlorophyll, do not show cellulose in their cell wall (except for some aquatic fungi) and do not store...
starch as a reserve substance. Besides, their cell wall is formed by chitin, the same substance enveloping the body of arthropods. Because of these and other differences, in 1969 they passed to be classified as a Kingdom apart. The Kingdom Fungi is constituted by six divisions, four of them having medical interest: Zygomycota, Ascomycota, Basidiomycota and Deuteromycota. In the last years, the introduction of new methods of analysis, particularly biotechnological techniques, produced many modifications in the classificatory system of fungi. The 1995 edition of the Dictionary of Fungi, a reference work for students of that subject, considers them distributed into three distinct kingdoms: Protozoa, where some pathogens are included, such as, for instance, species of the genera Plasmodiophora and Spongospora; Chromista, containing the Oomycota fungi; and the Kingdom Fungi itself, constituted by the so-called true fungi. One of the most significant changes was the transference of Oomycetes from the Fungi Kingdom to the Kingdom Chromista. According to specialists, the Oomycetes differ from true fungi by several structural, biochemical, physiological and molecular characters. Another important change was the extinction of the Class Deuteromycetes, formed by the so-called imperfect fungi (those whose sexual stage has not been identified). The recent modifications in the taxonomy of the fungi are still matter of dispute among specialists and new changes may occur with the introduction of more advanced techniques.

**Fungoid mycosis:** also called fungoid granuloma, ulcerating scrofuloderma, Alibert’s disease, Alibert-Bazin’s syndrome, fungoid fibroma, granulosarcoid, granulosarcoma and sarcomatoid granuloma. A rare and fatal disease, characterized by progressive and chronic reticulosis of the dermis, with proliferation of abnormal cellular elements, necrosis of liquefaction and invasion of the epidermis, with the formation of clear spaces containing mononucleate cells (Pautrier’s abscesses). The commonest of lymphomatosous diseases attacking the skin, fungoid mycosis is characterized by the development of lichenoid plates, which become painful red and mild tumors, with a tendency to ulceration and expansion. It was first described by Jean-Louis-Marc Alibert (1768-1837), French dermatologist who, in 1835, called it fungoid mycosis due to the shape of the tumors, which resemble mushrooms, and not at all due to his intention of stressing a fungal etiology whatsoever. Though unfit, the name is maintained due to its historical antecedents.

(See Bacteria; Mushroom; Hypha).

Sources: Cardenal, 1947; Houaiss, 2001; Stedman, 1979; www.59.

**Furunculosis:** staphylococcal abscess caused by *Staphylococcus aureus*, characterized by the synchronous and consecutive appearance of furuncles. An extremely acute and painful infection, limited to the sebaceous hair follicles, assuming the shape of an abscess in the central part of the swollen region, which disappears at variable intervals. It habitually occurs in the armpits, the buttocks and the nose.

Sources: D’Elia, 1926; Houaiss, 2001; www156.
Goa powder: See Chrysarobin.


Gram’s method: a technique of histological coloration developed by the Danish doctor Hans Christian Joachim Gram (1853-1938). Employed in the study of pathogenic microorganisms, it is the most popular method for the classification and identification of bacteria. It is based upon the greater or lesser retention of certain dyes in the interior of the bacterial cell due to the structure and chemical composition of its cellular wall. In the beginning of the process, bacteria are submitted to a staining by gentian-violet and afterwards to a solution of lugol. After discoloration...
in alcohol, the microorganisms are rinsed, counter-stained with safranin, again rinsed and then dried. Those that retain the acquired coloration are classified as Gram-positive, those which do not are called Gram-negative. (See Fuchsin; Staining).

Sources: D’Elia, 1926; Dorland, 1947; Nosso Século, 2002; Houaiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Stedman, 1979.

Guayacol: a substance derived from creosote, which in turn is extracted from beech trees (common designation for trees of the genera Fagus and Nothofagus, family Fagaceae), used in a large measure in the treatment of pulmonary tuberculosis and local antiseptic. Some of its derivates were also used in the treatment of typhoid fever (guayacol carbonate), rheumatism and intestinal affections (guayacol salicilate). It also served as an expectorant. (See Creosote).


Gummatous lymphagitic sporotrichosis: the same as Schenck’s disease. (See Sporotrichosis).


Gynocardic acid: substance constituted by the mixture of fat acids extracted by saponification from chalmoogra oil. Of a pasty and crystalline aspect and yellow color, it is soluble in alcohol, ether, chloroform, benzine, etc. It was employed in the beginning of the 20th century in the treatment of leprosy, psoriasis, eczema and lupus. Applied by means of subcutaneous injections, it seemed to be more efficient than the oil and better tolerated by patients. According to Cardenal, it is the oil extracted from Gynocardia odorata, a plant belonging to the family Bixaceae. Hackh, by his turn, presents it as the product of a mixture of acids from chalmoogra oil with non-saturated acid extracted from Gynocardia odorata seeds.

Sources: Cardenal, 1954; Grant, 1944; Littré & Gilbert, 1908; Parascandola, 2003.
**Hard chancre**: typical lesion due to primary syphilis, characterized by hard and painless ulceration, generally located on the genital region. It starts developing during the first phase of the disease, which goes from the development of the chancre itself up to the surging of the eruption. It generally begins about a month after contagion and abates spontaneously within three to five weeks. For a long time, clinical manifestations of syphilis were identified with those of gonorrhea. In 1838, French dermatologist Phillippe Ricord (1800-1889) established the differences between the two diseases and defined the primary, secondary and tertiary stages of syphilis. Also called syphilitic chancre or primary lesion. (See Syphilis).

Sources: Bier, 1957; Houaiss, 2001; Landouzy & Jayle, 1902; Littre & Gilbert, 1908; Stedman, 1979; Veronesi, 1982; Wyngaarden, 1992; www.164.

**Hebra, Ferdinand Ritter von**: born in Brünn, now in the Czech Republic, on September 7, 1816, he graduated in Medicine at the University of Vienna in 1841 and became assistant of Josef Skoda (1905-1881), one of the masters of Viennese clinical medicine and responsible for the section of thoracic diseases at the Allgemeines Krankenhaus (General Hospital), a section that, curiously enough, had an infirmary for skin diseases. Hebra dedicated himself initially to the study of mange. He supposed at first that it was a systemic disease, but soon verified that it was caused by a mite. He published his discovery in *Über die Krätze* (1844). Making experiments with irritants, such as croton oil, which, rubbed upon the skin, gave place to an eczema, Hebra observed that any inflammatory process could be produced by external factors, a fact proving the existence of specific pathological alterations of the skin, unexplainable at the light of general pathology. Without denying the existence of systemic diseases, he started to grant a great importance to local factors in the production of cutaneous diseases, deviating from the constitutionalist theories maintained by
the French school. He thus denied the humoral theory to explain the cause of those infirmities, calling attention to the role played by microorganisms. Hebra had been a student of Karl von Rokitansky (1804-1878), one of the founders of modern pathological anatomy, whom he succeeded in the presidency of Wiener Akademie der Wissenschaften (Vienna Academy of Sciences). He applied Rokitansky’s methodology in dermatological studies and in 1845 proposed a new classification of skin diseases, distributing them in 12 main categories. The system he created became an obligatory reference among dermatologists and was kept in use for almost a century. Notwithstanding the importance of his studies of pathological anatomy, it was in clinic that he left his greatest contributions. Hebra was the first to describe rhinoscleroma (1872), herpetiform impetigo (1872), lichen acuminatus, lichen scfofulosorum and the itch bearing his name (Hebra’s itch). He contributed to a better characterization of several other diseases, among them eczema marginatum and various types of xanthomas and pemphigus. He also established the nature of urticary and itchings as internal diseases. The two most important works of Hebra were the monumental Atlas der Hautkrankheiten (Atlas of skin diseases), with plates prepared by Anton Elfinger, and the Lehrbuch der Hautkrankheiten (Manual of skin diseases), completed by Hungarian Moritz Kaposi, a work consecrating his reputation and considered by many as the bible of dermatology. In a time when this specialty was beginning to be constituted, Hebra helped to consolidate the Vienna University into the foremost center of dermatological studies in the world. Thanks to the course he taught at the Faculty of Medicine and also in his own clinic, a new generation of dermatologists arose, under the leadership of equally brilliant doctors such as Moritz Kaposi (1837-1902), his son-in-law and successor at the chair of dermatology in Vienna; Heinrich Auspitz (1835-1886); Isidor Neumann (1832-1906); Filip Joseph Pick (1834-1910) and Paul Gerson Unna. His son, Hans von Hebra, was also professor of dermatology and one of the founders, together with Oscar Lassar and Unna, of Monatshritte für praktische Dermatologie, the first dermatological journal of Germany, and, for a long time, one of the main divulgers of that specialty in the world. Ferdinand Hebra died in Vienna on August 5, 1880. (See Lichen; Lichen Acuminatus; Lichen ruber; Scabies; Rhinoscleroma).

Sources: Carneiro, 2002; Freedberg, 1999; Olpp, 1932; www.31; www.57.

Hektoen, Ludwig: North American pathologist, born in Westby, Wisconsin, on July 2, 1863. He graduated in 1882 at the Faculty of Physicians and Surgeons of Chicago, of which he was a professor from 1892 to 1894. He also taught at Rush Medical College (1895-1933) and headed the Department of Pathology of Chicago University, in which he worked from 1901 to 1932. Hektoen was the first to produce blood cultures from living patients. He suggested that the reaction to blood transfusions could be avoided if the donor and the receptor had compatible blood types. He dedicated many years of research to cancer. He was a member of several national and international medical societies and the editor of medical journals, including Journal of Infectious Diseases and Archives of Pathology. He was also president of Chicago Societies of
Medicine (1919-1921) and Pathology (1898-1902). In 1915 he founded the Chicago Medicament Institute, and died in that city on July 5, 1951.
Sources: www.36; www.146.

Herpes: from the Greek verb herpo: to reptate, to move laboriously. It designates, in a general way, several inflammatory dermatoses caused by Herpesvirus, characterized by the eruption of vesicles on the skin and mucous membranes, which, when ruptured, provoke pain. There are two kinds of simple herpes virus: types 1 and 2. Type 1 produces small vesicles generally appearing near the mouth, called labial herpes of fever blisters. Type 2 is associated to a sexually transmissible disease producing painful ulcerations in the sexual organs. The herpes zoster, commonly known as shingles, is caused by the same virus of chickenpox (varicella), the Herpesvirus varicellae. The lesions caused by herpes virus dry out and disappear in about two weeks, but the virus keeps housed in the nervous cells and may cause a relapse of the disease in occasions of physical or emotional stress. Before Robert Willan (1757-1812), an English doctor considered as one of the founders of dermatology, the term herpes was used to designate non-contagious and hereditary, chronic skin diseases, distinguished either by their persistence or the reptating course over the skin, or yet by the sensation of itching. Willan himself gave the name herpes to a benign skin disease with acute course, manifested through great groups of vesicles in the shape of corn grains or lentils, filled with a clear liquid. According to Willan, the disease never attacked large tracts of the body, localizing itself at certain points and ended up spontaneously with the cure, leaving or not scars after the drying up of the vesicles and the fall of the crust. In the 1920’s this concept was generally accepted, except for the different way of aggregating the several types of herpes. In that time, labial and febrile facial herpes, genital or pro-genital herpes and herpes iris were already distinguished.
Sources: Carneiro, 2002; Houaiss, 2001; Landouzy & Jayle, 1902.

Herpes tonsurans: also known as tinea, tinea descalvans, tinea tonsurans, Saint-Aignan’s disease, serpigo and head trichophytosis. Herpes tonsurans is a part of a group of diseases generically known as tinea, caused by parasitic fungi and characterized by the infection of the skin of the scalp and its appendices. The disease habitually presents itself under the form of scaly areas and alopecia (total or partial loss of hair) with black dots indicating the break of hairs, which is a consequence of an affection of the intrafollicular part of hairs, which break up at the point of emergence. Then, circular plates, sometimes confluentely organized, take place. They come in variable numbers and sizes, pinkish at first, grayish-white afterwards, scaly, rarely pustular or crusty. The dotted region of broken hair stumps is sometimes intermingled with apparently normal hair tufts, giving the impression of tonsured areas. Among the common genera of fungi that cause this kind of infection are to be mentioned Microsporum, Trichophyton, Epidermophyton and Keratinomyces. Tinea tonsurans is also called trichophytic when caused by fungi of the genus Trichophyton (species tonsurans, mentagrophytes, and, more rarely, violaceum and verrucosum). It is microsporic when caused by species canis and gypseum of the genus Microsporum. Microsporum audouini, which only attacks humans, is common in cold and temperate countries and
may sometimes be found in the southern states of Brazil. Microsporic tinea tonsurans disappears spontaneously when the child reaches puberty, but the trichophytic one, especially that produced by *T. violaceum*, may persist up to the age of fifteen to twenty, or more. The increase of fungistatic fat acids of the sebaceous secretion of the scalp, as a suit of endocrine modifications, explains why the affected regions are rendered inhabitable for these species. Treatment of tinea is made with microcrystalline griseofulvin, in pills or suspension. Topical treatment is almost unnecessary, but may help cure and prevent infections during treatment. Since the beginning of the 20th century, the name “tinea” came to designate several affections of the scalp: eczema, psoriasis, herpes tonsurans, etc. Nowadays, herpes (having nothing to do with herpes tonsurans) generically designates several inflammatory dermatoses caused by herpesvirus. The expression *herpes tonsurans maculosus et squamosus* has been used by Hebra as a denomination for the disease now known as pityriasis rosea. (See Herpes; Pityriasis circinata marginata; *Microsporum*).


**Herrick, James Bryan**: North American doctor born in 1861, in Oak Park, Illinois, died in 1954, in Chicago. He concluded his studies in 1888, at Rush Medical College, where he was professor from 1900 to 1927. He also worked at Cook County Hospital and at the Presbyterian Hospital of Chicago. He began his practice as general clinic, but soon developed an interest in internal medicine, particularly in cardiovascular diseases. Herrick was the first to describe coronary thrombosis and to identify it as the origin of many heart attacks. He discovered sickle-shaped anemia in 1910 and carried out many important studies in this area. President of several medical associations, he was awarded the American Medical Association’s Distinguished Cross.

Sources: www.36; www.37; www.38.

**Hirsch, August**: doctor and historian of medicine born in Danzig, at that time in Prussia, on October 4, 1817. Recognized as one of the great names of medical geography, he took part in several expeditions to study, from a global perspective, the distribution of various diseases, such as plague, cholera and cerebrospinal meningitis. In his studies about rachitism, for instance, he established its relation with cold and wet climate, affirming that the disease could not exist under tropical and subtropical climates. Among his main works are to be mentioned *Handbuch der historisch-geographischen Pathologie* (1881-1886, Manual of historico-geographic pathology, 3 volumes), *Geschichte der medizinischen Wissenschaften in Deutschland* (1893, History of medical sciences in Germany) and *Biographisches Lexikon der hervorragenden Ärzte aller Zeiten* (1884-1888; 1929-1935, Biographical encyclopaedia of illustrious doctors from all times, 6 volumes), of which he was the editor. He died in Berlin, where he still taught, on January 28, 1894.

Sources: Lello, 1942.

**Hydrated Chloral or Chloral Hydrate** \(\text{[Cl}_3\text{CHO(OH)}_2]\): an extremely toxic substance, irritant to mucous membranes, employed in the production of dichlorophenyltrichlorethene,
the insecticide more commonly known as DDT. Discovered in 1832, it is obtained from the combination of chloride with alcohol. When water is added, it changes into choral hydrate, used as soporific.
Sources: www.82; www.88; www.89.

**Hydrochloric acid [HCl]:** hydrogen chloride or yet muriatic acid, it is used in medicine as a caustic agent and in cases of achlorhydria (absence of hydrochloric acid in the gastric juice). By the end of the 19th century, it was often used in the treatment of skin ulcers, in cases of stomatitis resulting from mercurial treatment, aphtha, candidiasis, dyspepsia, stomach atony, tuberculosis and liver affections.
Sources: Houaiss, 2001; Paulier, 1882; Stedman, 1979.

**Hypha:** structural unity of the vegetative body or mycelium of most fungi, forming simple or ramified filaments, divided or not by transversal septa. In many types of fungi the mycelium grows below the surface of the matter from which they feed.
(See Fungi).

**Hyphomycetes:** a class of imperfect fungi found in aquatic or terrestrial habitats, provided with well developed mycelia, among which are included molds, some of them pathogenic.
(See Fungi).
**Ichthyosis**: hereditary dermatosis characterized by hypertrophy of the horny layer of the skin, which provokes a desiccation of epidermis, which then loosens scales similar to those of fish. Since the end of the 19th century, distinct forms of ichthyoses are known, among them the simple, the serpentine and the hystrix ichthyoses. The first description of the disease was made by Robert Willan (1757-1812), in 1808.

Sources: D’Elia, 1926; Fitzpatrick, 1971; Houiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Stedman, 1979; www.211.

**Iodine**: a solid and scintillating chemical substance from the family of halogens, atomic number 53, symbol “I” and electronic configuration [Kr]4d105s25p5, volatile when heated. It was accidentally discovered in 1811 by the French chemist Bernard Courtois (1777-1838), in charge of the production of potassium nitrate for the armies of Napoleon Bonaparte. His process was based upon the transformation of calcium nitrate original from saltpeter mines into potassium nitrate, through the potash obtained from the ashes of marine algae. Using sulphuric acid to extract the impurities of those ashes, Courtois detected the presence of a tenuous smoke that condensed itself and corroded copper objects. Later on, Joseph Louis Gay-Lussac (1778-1850) identified such a substance as a new chemical element, which he called iodine, a word derived from the Greek *iodès*, meaning “violet”. Iodine is amply found in nature, associated to sodium in seawater residues, in sponges and marine plants. It is also present in the flesh of fishes, vegetables and fruits (pineapple, watercress, leek, prune and onion, for instance), and a few minerals such as laurite and calcium iodide, principally extracted from Chilean deposits of nitrates. In man, iodine is deposited in the thyroid gland. Its foremost application in medicine is as topical antiseptic, more commonly known as “iodine tincture” (2% iodine with 2.4% sodium iodide in alcohol at 50%). It is used internally in cases of
scrofulism (lymphatic tuberculosis), ganglionic hypertrophy, rachitis, syphilis and problems in both serous and mucous membranes. [F1]. There is yet radioactive iodine (isotope I 131), most efficient in the diagnostic of thyroid cancer. Other applications of iodine and its sub-products are: contrast material for photography, for X-rays, alcoholic iodides, iodoform, machine oils, and yet as raw material in the production of metals such as hafnium, silicon, titanium and zirconium. Researches on iodine action upon animal organism became particularly important from 1895 on, when its relation with the thyroid was revealed. It did not take long to verify that the cause of goiter was related to problems of absorption and fixation of iodine in that gland, leading to an abnormal functioning of it (hyperthyroidism). Because of that, in mountainous regions of Europe far from the sea, where the incidence of goiter is common, it is regular practice to add a small portion of iodine to kitchen salt to compensate for this insufficiency in the alimentary diet. Indispensable to global metabolic functioning, iodine is influential in the composition of thyroxin and triiodothyroxin, hormones of the thyroid gland that act upon renal and respiratory functions, muscles and bones, the cardiovascular system and nervous system (thermogenesis). The lack of iodine in childhood and adolescence may interrupt or retard osseous development (rachitis). In that phase, the reduction of the thyroidean activity may also provoke severe physical and intellectual disturbances known as cretinism. The slightest effects of hyperthyroidism are cutaneous (swollen eyelids, dried integument), muscular (anenergy and cramps), neuropsychic (apathy, slowness in thinking), as well as amenorrhea, anorexia, dyspepsia, hypothermia and sexual impotence. The use of iodine in medications must be extremely careful, as its prolonged use or its use in excessive doses cause poisoning (iodism). Iodized substances used for contrast in clinical analyses may provoke skin rash and other allergies. As a preventive measure against anaphylactic shocks due to intravenous urographies, all the necessary tests of sensibility to iodine should be made. Several types of medication have iodine in their formulation: antialgics, antiarrhythmics, antiasthmatics, antigouts, antihypertensors, external and intestinal antiseptics, bronchial dilators etc. (See Iodide Tincture; Syphilis).


Iodide tincture: a solution obtained by diluting iodine in alcohol. Chemical element of the halogenes family, represented by the symbol I and atomic weight 53, iodine, in high concentrations, is poisonous and may cause serious damages to the skin and tissues. Diluted in alcohol it has been used in medicine as antiseptic. According to Paulier, by the end of the 19th century iodine tincture was principally employed for its revulsive properties, being rubbed or applied with cotton over the skin. (See Iodine).


Iodoform \([\text{CH}_3\text{I}]\): a substance, now in disuse, developed in 1822 by the French pharmacist and chemist Georges-Simon Serullas (1774-1832), iodoform presents itself in crystallized...
form as shining sulphur-yellow pellets that evaporate at room temperature and volatilize with vapor. It contains 96% of iodine in its formulation, having a pungent and unpleasant smell. Used as topical anesthetics and antiseptic of prolonged action, it has antimicrobial effect upon mucous membranes reducing the secretion of lesions. A result of the reaction of iodine with alcohol and some alkaline metal, it may be prepared as oil, paste or hydrosoluble substances such as distilled water or physiological serum. In the past it was very much used in endodontic treatments of channels, but was progressively abandoned because of the toxic properties of iodine, its unpleasant smell and taste, and because it changes the color of teeth.

(See Iodine).

**Kanaka**: native or inhabitant of Hawaii. It also designates natives from New Caledonia and other islands of Melanesia, in the Pacific Ocean.

Sources: Ferreira, 1999; Houaiss, 2001; Webster, 1971.

**Kaposi, Moritz Kohn**: Hungarian doctor born in Kaposvár, on October 23, 1837. After his graduation at the Faculty of Medicine of Vienna, in 1861, he was named assistant of Ferdinand von Hebra (1816-1880), a famous Austrian dermatologist, with whom he worked from 1862 to 1867. A prolific writer, Kaposi made several original contributions to dermatology, dedicating himself to the clinic, pathologic and therapeutic aspects of diseases with cutaneous manifestations. He was especially interested in lesions caused by syphilis in the skin and mucous membranes, as well as in the etiology and treatment of that disease. He undertook studies of *dermatitis herpetiformis* (first described by von Hebra), *lymphoderma perniciosum* and *lichen ruber moniliformis*, diseases characterized by him as specific entities. Together with Hebra and other dermatologists he produced descriptions of *lupus erythematosus* of the skin, of rhinosclerome and rhinophyma, besides publishing papers on dermatology (“On diseases of the skin, including the exanthemata”, 1866-1880; “Lehrbuch der Hautkrankheiten”, 1874-1877). In 1875 he assumed the chair that had been occupied by his master at the University of Vienna and in 1879 was named director of the dermatological clinic of the same city. Married to Hebra’s daughter, who was a catholic, Moritz Kohn, a Jew, adopted the surname Kaposi as a homage to his birthplace. Among the various eponyms associated with the Hungarian doctor, Kaposi’s sarcoma must be mentioned, a rare type of cancer described by him in 1872, nowadays associated with Aids. Kaposi died in Vienna on March 6, 1902.

(See Erythematous lupus; Hebra, Ferdinand Ritter von; Lichen).

Kava-kava: popular name of an herb of the family Piperaceae, whose scientific designation is *Piper methysticum*. The powder prepared from its roots has aphrodisiac, analgesic, anesthetic (local), tranquilizing, anti-convulsive, anti-depressive, anti-inflammatory, spasmolythic, narcotic and relaxing properties. Prohibited in certain countries (e.g., France), it is indicated for states of agitation, anxiety, depression, stress, insomnia and tension. The use of cava-cava must be avoided in cases of Parkinson’s disease, pregnancy, milk-feeding and by users of anti-depressives, anxiolytics, anti-psychotics or other substances that cause depression of the central nervous system (hypnotics, sedatives, etc.). The use of high doses for a long period of time may result in inflammation of the body and eyes. Initially, it has a stimulant effect, but leads to depression and even to the paralysis of the respiratory system. It may also provoke severe damages to the liver. It was prescribed during a long time for the treatment of gonorrhoea, incontinence, vaginites and other diseases. Sources: www.103; www.131.

Kimball, John Hancock: North American doctor born on July 9, 1832, in a part of the state of Maine later on annexed to Bridgton, where he died on June 20, 1902. After he graduated in Medicine at Harvard Medical School in 1857, he participated in the North American Civil War (1861-1865), having been twice recruited as army surgeon of the Union. Accompanied by his daughter he arrived in Hawaii on June 11, 1882. In October of that same year he was named doctor of the U. S. Government for the Hilo district, where he remained until May 1888. Transferred to Honolulu, he became responsible for the dispensary of the Hawaiian capital, which he did until January 1890, when he was made president of the Health Council of the Kingdom of Hawaii. He resigned after nine months of work, returning to the United States in the beginning of 1891. Sources: www.193.

Klebs, Edwin: German doctor and bacteriologist born in Koenigsberg on February 6, 1834, died in Bern on October 23, 1913. Famous for his original observations on infectious diseases, based on bacteriology, he conducted researches on tuberculosis, malaria, anthrax and syphilis. In 1879, together with Italian doctor Tommasi Crudeli, he described *Bacillus malariae*, a microorganism they considered to be the cause of malaria. Klebs became especially notorious for his description of the bacillus of diphtheria, in collaboration with Friedrich August Johannes Löffer, in 1884. Assistant of Rudolf Virchow (1821-1902) at the Berlin Institute of Pathology between 1861 and 1866, he lectured pathological anatomy in several European universities and, from 1896 on, at Rush Medical College in Chicago. Besides monographs and articles, he published a handbook on pathological anatomy (1869-1876) and a treatise on general pathology (1887-1889).


Koch’s Lymph: sterile liquid extracted from a culture of tuberculosis bacilli, employed in the diagnostic of that disease. Also called tuberculin, it was used, without success, by Robert Koch (1843-1910) in the treatment of tuberculosis.
(See Tuberculosis).
Sources: Houaiss, 2001; Larousse, 1971; Landouzy & Jayle, 1902; Littré & Gilbert, 1908.

**Koebner, Heinrich**: German dermatologist (1838-1904), considered the founder of clinical dermatology in universities and the pioneer of dermatology in Breslau (Prussia). He has his name associated to a phenomenon he described in 1872: the isomorphic reaction or effect, also known as Koebner’s phenomenon, occurring in certain types of dermatoses, principally psoriasis, as a response to traumas such as excoriations, burns, pressure upon the skin, originating typical lesions in the affected parts.
Laudanum: generic name of a medicament, widely used in Adolpho Lutz’s times, which has opium as its base element and, due to its sedating properties, it is used in external applications and sometimes internally. Without further qualification, it designates the formulation created by the English physician Thomas Sydenham (1624-1689), a wine or tincture of opium composed by officinal opium (200 g), saffron (100 g), cinnamon (15 g), clove (15 g) and Grenache’s wine (1,600 g).


Leloir, Henri Camille Chrysostôme: French dermatologist who was born in Tourcoing on November 30, 1855 and died in Paris on June 18, 1896. He studied first at the Faculty of Medicine at Lille and later in Paris, where he obtained his doctorate in 1881. He is principally recognized for his researches on cutaneous tuberculosis, trophodermatoses – dermatoses due to problems of nutrition of the skin – and leprosy, which he studied in Norway, Italy and southern France. He was one of the defenders of leprosy transmission by means of inoculation of its agent by mosquitoes, as he believed that the epidermis and the hypodermis constituted barriers to the entrance of the microorganism that caused the disease, preventing direct contagion through simple contact. Head of Saint-Louis Hospital clinics in 1882, he lectured dermatology and syphilis in Lille, under the condition of professeur agrégé from 1884 on, being named professor of the faculty the following year. Leloir’s disease, also known as lupus vulgaris erythematoides, is a form of cutaneous tuberculosis keeping some resemblance to lupus erythematosus. (See Leprosy; Tuberculous Lupus).

Sources: www.178; www.204.

Leprosy (Hanseniasis): in Portuguese also called hansenise, elefantíase-dos-gregos, gaña, gafeira, gafo, guarucaia, lazeira, macota, macutena, mal, mal-bruto, mal-de-cuia, mal de Hansen, mal-de-lázaro, mal-de-são-lázaro, mal-do-
sangue, mal-morfético, morféia. In Brazil, the substitution of the word “lepra” by “hanseniasis” was initially proposed in the 1970’s, in the State of São Paulo, in the belief that this would help to undo the millenarian stigma conferred upon sufferers of that disease. The proposal was rendered official by the federal government by means of Decree 76078, of August 4, 1975, which also altered the denomination “Divisão Nacional de Lepra” to “Divisão Nacional de Dermatologia Sanitária” and of “Campanha Nacional contra a Lepra” to “Campanha Nacional contra a Hanseníase”. Twenty years later, through Law 9010 of March 29, 1995, it was determined by the federal government the substitution of the term “lepra” and its derivates in the language employed in official documents of the centralized and decentralized administration of the Union and its member States. A chronic, infecto-contagious disease, curable since the years 1940-1950, it is caused by Hansen’s bacillus (*Mycobacterium leprae*), a microorganism identified by the Norwegian doctor Gerhard Henrik Armauer Hansen (1841-1912), in 1874. It manifests itself by means of anesthesic cutaneous lesions and neuritical disturbances, evolving, according to the patients’ resistance, either to spontaneous regression or to the progressive worsening of the clinical cadre, with gradual engagement of the skin sensitive nerves and nervous trunks, of the nasal and otopharyngolaryngeal mucous membranes, eyes and viscera. The transmission of the disease still holds obscure aspects, but it is admitted that it occurs, according to some physicians, mainly under conditions of prolonged and intimate contact: the bacilli eliminated by means of spittle, nasal mucus and ulcerated lesions may reach the skin or the mucoses (mainly the nasal ones) of healthy persons and penetrate the organisms through chinks there present. The infection by the bacillus, however, does not necessarily imply the acquisition of the disease, which depends on the degree of resistance of each individual and from peculiarities of Hansen’s bacillus: high infectivity and low pathogenicity, that is, the capacity of infecting a large number of people, but of developing as a disease in a small number of infected persons. Nowadays, four clinical forms of the disease are recognized: undetermined, tuberculoid, dimorphic and Virchowian. In order to simplify the diagnostic, the World Health Organization has adopted another classification, distinguishing the categories bacilliferous (multibacillary) and non-bacilliferous (paucibacillary). The former, responsible for the chain of transmission, when untreated, is characterized by the presence of a large number of bacilli in the infected individual. In the second category, *Mycobacterium leprae* occurs in scarce numbers, inclusively presenting negative results in laboratorial exams. Along the 19th and 20th centuries there have been several attempts at establishing a precise classification, accounting for the different clinical manifestations of leprosy, from the clinical, bacteriological, immunological, histopathological and evolutionary point of views. According to François Henri Hallopeau (1842-1919), the differentiation established by Robinson, in 1819, between tuberculous and anesthesic leprosy had first been accepted by Daniel Cornelius Danielssen (1815-1894) and Carl Wilhelm Boeck (1808-1875), and afterwards by several other authors. In addition, a mixed form was moreover accepted, in which both forms
described by Robinson manifested themselves. Using parameters not very different from those of Robinson, Henri Camille Chrysostôme Leloir (1855-1896) distinguished the tegumentary and the nervous forms; Gerhard Armauer Hansen and Carl August Looft (1863-1943), the tuberous and the maculo-anesthesic forms. Adolpho Lutz, by the end of the 1880’s, recognized three modalities of leprosy – tuberous, nervous and maculos – in addition to mixed forms. Paul Gerson Unna (1850-1929) classified the cutaneous manifestations of leprosy into two groups: lepromas and neuroleprides (cutaneous eruption following a neuritis due to Hansen’s bacillus). In the ensuing years several other arrangements and terms for the various manifestations of hanseniasis were proposed.


**Lichen**: in dermatology, generic designation of several types of dermatoses characterized by more or less pruriginous papulous eruptions, with skin thickening and asperity and disposition similar to that of lichens growing over rocks. The use of the term *lichen* was the object of intense polemics among 19th century dermatologists. Ferdinand von Hebra (1816-1880) divided the diseases thus called into two groups – scrophulous lichen, developing on the trunk, dorsum and low abdomen, under the form of more or less voluminous, flattened papulae, in groups or plates, of slow evolution, with occasional complications; and *lichen ruber*, with the varieties *acuminatus*, and *planus*. In *lichen acuminatus* he included the eruptions whose papulae are conical and extend over the entire body surface. In *lichen planus*, he united the lesions consisting of shining, dry and violet papulae, generally very resistant and pruriginous, especially located on the neck, forearm and inferior regions of the abdomen. It befell to a disciple of Hebra, Moritz Kaposi (1837-1902) the tentative of establishing some order in the classification of lichens. According to that Hungarian doctor, the *lichen ruber* described by Hebra, with its varieties *acuminatus* and *planus*, were nothing else than the *lichen planus* established by Erasmus Wilson (1809-1884) in 1869. Kaposi’s definition ended up by supplanting Hebras’s and a more correct knowledge of the etiology of the several types of lichens resulted in the reclassification of many of them in the following decades. Now *lichen ruber acuminatus* is described as *pityriasis rubra pilaris*. *Lichen ruber* and *lichen planus* are still considered synonyms.

(See *Lichen acuminatus; Lichen obtusus; Lichen planus; Lichen ruber*).


**Lichen acuminatus**: also known as Hebras’s lichen in older sources (such as Cardenal, 1947 and D’Elia, 1926), where it was defined as a variety of *lichen ruber*. Stedman (1979) considers *lichen ruber, lichen acuminatus*, Wilson’s lichen and *lichen planus* as synonyms, preferring to employ this last term to designate the disease characterized by eruptions of flattened, shining and violet papulae on flexory surfaces, male genitalia and the mouth mucous membranes. It may also form linear groups and hypertrophied lesions
on the legs. According to other more recent sources, *lichen acuminatus* is one of the names given to the *pityriasis rubra pilaris*, which, by its turn, is also known as psoriasiform lichen, Devergie’s disease, or *lichen ruber acuminatus*. *Pityriasis rubra pilaris* is a rare and progressive disease of the skin, characterized by the diffuse formation of scales and erythema (a hardening of the skin with persistent inflammation) of scalp, palms of the hands and soles of the feet. The characteristic primary lesion is a small, hard, dome-shaped, rose- or red-colored papula with a keratosus central point traversed by a hair. The papulae end up by fusing together forming well-delimited, large, erythematous, orange-colored plates, among which islands of normal skin may be observed. The cause of the disease remains unknown, and a hypothesis has been raised that it may be related to a failure in the metabolism of vitamin A. Treatments more frequently used are oral or topical administration of retinoids and vitamin A. Most cases appear sporadically, but there are infantile cases suggesting a genetic cause. According to the International Classification of Diseases, organized by the World Health Organization – WHO, *lichen planus* and *lichen acuminatus (pityriasis rubra pilaris)* are distinct diseases, therefore classified under different groups.

(See Lichen; *Lichen planus*).

**Lichen planus**: a dermatological infection characterized by the appearance of small, prominent spots on several parts of the body. The characteristic lesions are prominent, flat, violet-colored with white stripes on their surface, accompanied by much itching, in some cases exasperating. When the lesions recede they leave dark spots on the skin. *Lichen planus* may manifest itself under different forms, with the formation of ring-like, linear, verrucose (on the feet and ankles) or atrophic blisterly lesions; erythematous *lichen planus* is liable of malignant evolution. In general, however, the disease is benign, with spontaneous remissions and exacerbations, typically persisting for one or two years, and it may follow a chronic or reincident course for a much longer time. It may be associated with minor symptoms or cause a considerable discomfort and incapacity. When the lesion reaches the entire tegument it is called generalized *lichen planus*. In the mucous membranes, which are affected in 50% of the cases, lesions are whitish and seem dead branches of a tree. In the mouth, the sensation is of ardency and burning. In about 10% of the cases of *lichen planus*, only mucous membranes are affected. The primary diagnostic is commonly made by a dentist from the observation of the buccal mucous membranes, where the initial symptoms appear. Although the etiology of the disease is unknown, numerous clinic observations have confirmed the fact that it occurs mainly in persons submitted to nervous tension, many debates having been raised about the theories postulating the self-immune and the psychological natures of *lichen obtusus*: a kind of *lichen planus* where papulae are more voluminous (instead of flattened) and less pruriginous. The purple-colored discs have a round or oval shape, measuring 1-2 cm in diameter and are generally situated on arms and thighs.
planus. The expression *lichen ruber planus* has been used to denote the color of the lesion, but it fell into disuse. In 1869, Erasmus Wilson gave the name *lichen planus* to the dermatosis that had probably been already described by Hebra as *lichen ruber*. At least two thirds of the cases occur in persons between 30 and 60 years old, being commoner in women. There is a great variety of topical and systemic therapies for *lichen planus*, options depending on the chronicity, symptomatology and variations of responses to the dermatosis. Relaxing baths with oats, the application of creams, lotions or unguents of triancilone or betametasone, especially combined with corticoids, are considered beneficial. (See Lichen; *Lichen ruber*).

Sources: Houaiss, 2001; www.4; www.20.

**Lichen ruber.** term used in the 19th century, when Adolpho Lutz began his studies in dermatology, to designate what nowadays is called *lichen planus*. According to D’Elia (1926), there were two varieties of *lichen ruber*, *lichen acuminatus* and *lichen planus*, both pruriginous. The prognostic was severe and the affection tenacious and rebel to treatment, which consists in proper diet, the administration of arsenic preparations (Fowler’s liquor, cacodilates) and the topical use of antiseptics and analgesics.

(See Lichen; *Lichen acuminatus*; *Lichen planus*).

Sources: D’Elia, 1926; Stedman, 1979.
Mercury [Hg]: liquid and metallic chemical element, atomic weight 80, used to form compounds with medicinal purposes, to which were attributed, during Adolpho Lutz’s times, antisyphilitic and antiseptic properties, in the latter case under the form 1-2% unguents. Mercury was also used as a component of cathartics, tooth pastes and anti-helminthic products; some mercurial compounds are still used today, albeit rarely. Mercury is, in addition, employed in thermometers, barometers, amalgams for dental fillings, for separating gold from auriferous sands, in fluorescent lamps, etc. Mercury, and its main source of extraction, cinnabar, have been known since the most remote times. The Chinese extracted it in Kwichan mines, since the year 1200 B.C. Phaenicians, 700 year before the Christian Era, used this metal to extract and purify gold. In India it was believed that mercury possessed aphrodisiac properties. The Incas utilized it as painting material, giving it the name llampi. Mercury was employed by the Egyptians since the 18th pharaonic dynasty (1600 b.C.), which was proved by the fact that the metal was found in a funerary urn from that period. Greeks and Romans used cinnabar in paintings and some of their most renowned physicians employed it under the form of unguents. Mercury designated the metal, the planet, and a god (the god of commerce and the messenger of the gods in Olympus); in order to avoid confusion, the Greeks called the metal hydrargyros, meaning quick-silver. The Latin form was hydrargyrum. It is from this word that its symbol, Hg, comes, as well as the terms hydrargyria, hydrargyrism, hydrargyrosis, now known as mercurialism, an intoxication provoked by the excessive absorption of the metal. Although it was known and used since Antiquity, up to the 15th century its use had been scarce, almost always restricted to the fabrication of inks and to medicine. Its growing consumption began when, in 1557, Bartolomé Medina, from Seville established a method for the cold amalgamation of silver minerals, by using that metal. In the 16th century, Paracelsus introduced its use in the treatment of syphilis;
Torricelli used it in the first barometer, in 1643; and in 1720 Fahrenheit used it in the confection of the thermometer. Mercury served for the analysis of gases in the works of Priestley, by the end of the 18th century. According to Wyngaarden (1992), nowadays over sixty professions are involved with the exposition to mercury: pesticides, insecticides and fomicides manufacturing, fabrication of instruments containing, lamps, neon lamps, batteries, paper, inks, dyes, electric equipment and jewels, as well as materials used by dentists. Besides the industrial or occupational exposure to mercury, intoxication has also been the result of inadvertent contamination of cereals by pesticides containing the metal, as well as of accidental or intentional ingestion or injection of elementary mercury (or compounds based on this metal). (See Syphilis).


Metritis: term used in gynecology to designate a uterine inflammation, the types varying according to the affected part: cervical metritis (collum of the womb), corporeal metritis (body of the womb) and interstitial and parenchymatous metritis. The first one manifests itself by simple leucorrhoeas or small hemorrhages, demanding local treatment; the other mainly occur after childbirths or abortions. Metrites are efficiently treated by means of antibiotics. According to D’Elia (1926), they start at the mucous membrane and extend to the entire parenchyma of the organ; D’Elia divides its several forms into two groups: acute and chronic metrites; treatment is urgent in both cases. It is also called hysteritis or uteritis.


Micrococaceae: a family of bacteria of the Order Eubacteriales, whose representative genus is Micrococcus. It comprises Gram-positive, round-shaped species, generally motionless and aerobic, occurring alone, in pairs, in tetrads, agglomerates, irregular masses or even chains. It includes free-living, saprophytic, parasitic and pathogenic forms. (See Micrococcus).

Sources: Houaiss, 2001; Littré & Gilbert, 1908; Stedman, 1979; www.160.

Micrococcus: designation common to the bacteria of the genus Micrococcus, which are Gram-positive and shaped like little coconuts. Aerobic, rarely motile, they are found in foods and used in the cure and production of some types of cheese. Adolpho Lutz and many other authors from the 19th century used the term “coccus” as synonym of micrococcus. (See Bacteria).

Sources: Houaiss, 2001; Miquel & Cambier, 1902.

Microsporum: term of Greek origin meaning small seed. Microsporum belongs to dermatophytes, a heterogeneous group of fungi parasitic on the skin and hairs of men and several animals, living upon the keratin of the corneous layer, nails and hairs, and often provoking an inflammatory reaction of the skin, with pruritus, erythema, scales and vesicles (Wyngaarden, 1992). Besides Microsporum, Trichophyton and Epidermophyton also belong to the group of dermatophytes. Several species belonging to the genus Microsporum cause scalp tinea, a fungal infection that primarily affects the hairs of the body. This genus of fungus is more commonly found in children that have not yet
reached puberty, when, generally, lesions disappear. *M. audouinii* is one of the causes of tinea, a disease transmitted from child to child through objects of personal use such as towels, bed clothes, hats etc. (Fitzpatrick, 1971). When scalp tinea is caused by *M. canis*, its agent may become fluorescent under Wood’s lamp. But, for diagnosis purposes, exams of preparations with KOH and fungal cultures, using torn hairs and scales from the affected areas of the scalp are made (Wyngaarden, 1992). *M. gypseum*, commonly inhabiting soil, generates inflammation in cats and dogs, which, by their turn, transmit the disease to men (Fitzpatrick, 1971). Murray (1910) qualified *Microsporum furfur* as the fungus causing tinea versicolor, and *M. minutissimum* as the agent of erythrasma, but Wyngaarden (1992) attributes the latter disease to *Corinebacterium*. (See *Herpes tonsurans*; *Pityriasis circinata marginata*).

Sources: Cardenal, 1947; Fitzpatrick, 1971; Murray, 1910; Wyngaarden, 1992.

**Miliary tuberculosis**: tuberculosis with generalized dissemination of the tuberculous bacillus and production of minute and countless small tubercles in several organs and tissues. (See Tuberculosis).

Sources: Cardenal, 1960; Stedman, 1979.

**Mold**: frequently found on the surface of organic matter, there proliferating fungi of the genera *Mucor*, *Penicillium*, *Aspergillus*, etc. (See Fungi).

Sources: Cardenal, 1960; Stedman, 1979.

**Molluscum contagiosum**: a chronic dermatological infection caused by the appearance of vesicles that transform into pustules. It is caused by a virus of the poxviruses family (*Molluscipoxvirus molluscum contagiosum*), normally occurring in children through contact with the skin of a contaminated person, most often attacking armpits, arms, neck and face. In adults, it mostly affects the genital region, being sexually transmitted. Its incidence is increasing within the immunodeficient population with Aids. The first clinical descriptions of the disease were produced in the beginning of the 19th century by Thomas Bateman (1778-1821) and subsequently by Henderson and Paterson, in 1841. Only in 1905, Juliusberg, Wile and Kingery revealed the viral nature of *molluscum contagiosum*, which is also called cutaneous condyloma, contagious mollusk, epithelial mollusk and sessile mollusk. (See Condyloma).


**Morphine** \[C_{17}H_{19}NO_{3}\]: one of the most important alkaloids of opium, used in medicine as analgesic, narcotic, sedative and anxiolytic. Morphine belongs to a group of substances derived from poppy (*Papaver somniferum*), from which opium is also extracted. Known for more than five thousand years, this plant was already used by Sumerians to fight against insomnia and intestinal constipation. The Greeks used opium in religious rituals and to give courage to warriors during battles. Galen and other physicians from the beginning of the Christian era prescribed the substance to victims of epilepsy, bronchitis, asthma, kidney stones, fever, melancholy, dysentery and other diseases. In the 19th century the use of...
opium spread along with the expansion of world commerce. In Great Britain, importation of the drug leaped from 40 tons in 1830 to 127 tons in 1860, of which 34 tons were re-exported to America. English businessmen transported opium from India to China, exchanging it for tea and silk. Its use grew to such a point that, in 1838, the Chinese emperor Chung Ch’en forbade the importation of opium, condemning its users to the most severe penalties. The British Empire rose in defense of the traffic of the drug and obtained victory in the so-called Opium War (1839-1842), obliging China to hand over the island of Hong Kong, to liberate the importation of opium and to pay indemnities for the cargoes confiscated during the conflict. In 1900, about half the adult male population of China was opium addicted, a calamity that only ended in 1949, with the victory of the revolution that led Mao Tse Tung to power. In the beginning of the 19th century, the main active substance of opium, morphine, was extracted. Its name derives from Morpheus, the Greek god of sleep. Certain sources attribute this innovation to Armand Seguin, a physician of the Napoleon army; others to Friederich Sertuener, a pharmacist from Hannover, dates varying between 1803 and 1806. Other medical innovation, the syringe with hypodermic needle, created by the French physician Charles Gabriel Pravaz in the 1850’s, facilitated the introduction of this and other drugs in human organism. Morphine then began to compete with opium in medicine and toxicomania. It continued to be used to give physical and psychological relief to persons recruited for wars, generating the so-called “soldiers disease”, responsible for thousands of addicted men. In the passage from the 19th to the 20th century, morphine was so disseminated that even in cafeterias and theaters of large cities it was common to see men and women injecting the “remedy of gods” into themselves. Addiction became a severe social and sanitary problem and led to a program of studies to obtain a medication with the same therapeutic value, but without involving dependence. Bayer thought it had found that substance in 1874, through the work of the same pharmacist who had developed aspirin, Heinrich Dreser: diacetylmorphine, better known as heroin, from the German heroisch, for its “heroic” capacity of subjugating evils. The supposed antidote, largely used in the treatment of tuberculosis and other diseases, soon became another poison to dispute the preference of addicts to opium and morphine. Later on, other poppy alkaloids were discovered, such as codeine and thebaine. During World War II, the scarcity of morphine led a German laboratory to the discovery of meethadon, afterwards used in the treatment of heroine addicts. In 1942, the United States Congress declared illegal the importation of this latter drug, and in the following decades its production and use in medicine were banished in almost all countries of the world. Opiates such as morphine possess a chemical structure capable of bonding themselves to neurotransmitters called endorphines, which are associated to the control of pain, sensations of pleasure, well-being and relaxation. Reaching the brains, those drugs depress the nervous centers responsible for pain and vigil, and the regions controlling respiration, heart beats and blood pressure. They interfere in the so-called pain-threshold, regulating the interpretation of pain signals received by the brains, without neutralizing other sensations, thus explaining its popular use as
anesthetics. As the human organism becomes dependent upon the drug, the situation is inverted, and the user comes to use it for disturbances caused by abstinence: nausea, vomits, diarrhea, muscular cramps, intestinal colics, lachrymation etc. The unregulated organism stops producing some substances and begins to produce too much of other ones. Addicts are subjected to more severe damages: deafness, blindness, inflammation of the heart valves, vein necrosis, coma and death. Presented as insoluble crystals with bitter taste, when morphine is combined with acids, it produces soluble salts with a content equivalent to 10% of its weight. Its action upon the central nervous system is manifested by a brief period of excitation followed by depression, the stimulation varying according to the type of drug and dosage. Morphine is used as analgesic in the treatment of violent pains (spasms of the smooth musculature or pains of cankerous patients, for instance (but its action upon the organism abates with time and dosages must be increased). It is injected in the form of hydrochlorides or sulfates and serves for the preparation of numerous derivatives (diamorphine, codeine, codetiline, heroin, metopon). The specific antidote to neutralize the effects of morphine is N-allyl-normorphine or nalorphine.


Mycobacterium leprae: the microorganism causative of leprosy, described by the Norwegian doctor Gerhard Armauer Hansen (1841-1912) in 1874. Also called Hansen’s bacillus, it is an aerobic, alcohol and acid resistant bacterium in the shape of a straight, or slightly curved rod, sometimes ramified. The genus *Mycobacterium* was proposed by Karl B. Lehmann and R. O. Neumann in 1896, for the agents of leprosy and tuberculosis. Up to now, it has not been possible to cultivate Hansen’s bacillus in artificial media, what partially explains the controversies about the mode of transmission of leprosy. (See Bacteria; Leprosy).


Mycosis: a disease caused by fungi, affecting plants and animals. Among the numerous species of the Kingdom Fungi, some develop in human tissues, causing greater or lesser lesions. Those having particular tropism for keratin, a fibrous protein that constitutes hairs, nails and the corneous layer of epidermis, proliferate there, determining fungi provided with septate hyphae and sexually reproduced through basidiospores. These pluricellular fungi, devoid of chlorophyll, consist of two parts: one under the ground, living upon buried matter that affords its food, and the other above the ground, called fructifying body or basidiocarp, producing cells called basidiospores, from which new beings are developed. The hat, commonly called mushroom, is in reality the stalk or stem which germinates from the mycelium.

(See Fungi; Schizomycetes; Hypha).

Sources: Houaiss, 2001; Silveira, 1981.

*Mus decumanus* (Pallas, 1778): a junior synonym of *Rattus norvegicus*, the Norway, brown or common rat.


*Mushroom*: the relatively large fructifying body of fungi belonging to the Class Basidiomycetes; filamentous
dermo-epidermic reactions. These, called ceratophytes by some authors together with dermatophiles, are the agents of superficial mycoses and only involve the skin and its annexes: scalp and groins tinea and tinea versicolor, for instance. The mycoaerophilous or anaerobic fungi, by their turn, find living conditions in dermis and hypodermis, in cavities and internal organs, originating deep or systemic mycoses. Mostly contracted through inhaling, they spread through lympho-hematogenic ways, reaching organs such as lungs, skin, liver and central nervous system.

To this group belong blastomycosis, coccidioidomycosis, cryptococcosis and histoplasmosis. The classical division of mycoses into "superficial" and "profound" is didactic, but cannot be rigorous, as affections produced by yeasts, predominantly superficial, sometimes determine systemic lesions. Querion and dermatophilic sycosis are examples of superficial mycoses with intense dermo-hypodermic involvement. On the other hand, profound mycoses may show secondary manifestations in their initial stages or evolution. The agents of those mycoses are then reached by topical fungistatics or fungicides, with relative facility.

Classic topicals still used nowadays are iodized alcohol at 1%, sulphur and its derivatives (sulphites, sodium hyposulphite), benzoic acid and its derivatives; mercurials and dyes, especially aqueous gentian violet at 1-2%. Keratolithics (such as salicylic acid at 2-5%) favor the action of topicals. More modern active substances are propionic and undecilenic acids and their salts, hexylresorcinol, tribromohydroxytoluene, chloroiodinehydroxyquinidine, bromosalicylchloroaniline, haloprogin, chlorotrimazol, myconazol, tolnaftate and tolcyclate. Nystatin and amphotericin B, in solution, suspension, gel cream or ointment, are topical antibiotics largely employed. As vaginal pills, ovules or creams, nystatin, amphotericin B and piramycin are useful in the treatment of vulvo-vaginites. Systemic medicaments are employed in profound mycoses and cavity mycoses, as well as in resistant and extended, dermo-hypodermic, follicular and ungual dermatophytoses. Potassium iodide, sodium iodide, sulfas, sulfones, calciferol, thiabendazole, clofazimine and 5-fluorocytosine, as well as the antibiotics griseofulvin, nystatin, amphotericin B, erythromycin, tetracyclines, chloromycetin and others (Veronesi, 1982). As a rule, mycoses are not transmitted from person to person. The natural habitat of several pathogenic fungi is limited to specific geographical areas. Consequently, the population living in those areas is more susceptible of contracting such "endemic mycoses". Some fungi are opportunistic pathogens, liable for causing diseases when the defenses of the host are altered. Cultures of fungi and histopathological studies made from infected body liquids (sputum, blood, urine and liquor) and tissues (skin, lungs, liver, bone marrow and lymph nodes) are the main methods for the diagnostic of mycoses. Their dissemination has increased with the growing use of antibiotics, which kill bacteria that destroy fungi. The terms fungal diseases and mycoses are synonyms.


Myxomycetes: a group of unicellular, generally free-living microorganisms, similar to fungi and extremely primitive. They are normally found on stumps and the bark of trees, decomposing wood and moist soil. They reproduce by means of spores disseminated by the
wind, which, upon germinating, originate filamentous structures of proteic nature called flagella, responsible for the locomotion of the microorganism. Later on, the flagella detach from the myxomycetes and unite into a gelatinous mass provided with slow, amoeboid movements. Next, these myxamoebae, united two by two, form a zygote (a cell formed from the fusion of masculine and feminine gametes), which may unite with other zygotes to form a multinucleate protoplasmic mass without cellular wall, called plasmodium. The plasmodium multiplies, originating a great number of spores of varied shapes, frequently found on the above indicated environments. The myxomycetes have a very complex taxonomic history. As they present characters in common with fungi and protozoans, they were already classified by biologists in one group or the other. They are now included in the Kingdom Protista.

(See Fungi).


Mange: See Scabies.

Matterstock, Georg: German doctor who was born in Würzburg on February 12, 1847, and who died in that same city on May 30, 1915. He was Privat-Dozent (1878) and ausserordentlich Professor (extraordinary professor) at the Faculty of Medicine of the University of Würzburg (1888), having directed the polyclinic of that institution.

Sources: www.143.
Neisser, Albert Ludwig
Siegmund: German dermatologist Born in Schwidnith, Prussia (now Swidnica, Poland) on January 22, 1855. Graduated in Breslau (1877), Neisser is mostly known by his bacteriological studies, especially the discovery of the etiological agent of gonorrhea (Neisseia gonorrhæae) in 1879. Among his professional realizations, are yet to be mentioned the description of the microorganism of leprosy (1879-1880), a motive of disputes with Norwegian doctor Gerhard Armauer Hansen, and the attempts to discover the etiological agent of syphilis and its possible transmission to man by animals. He worked with August Paul von Wassermann (1866-1925) and Carl Bruck (1879-) on the development of a test of serum-reaction for syphilis, later on known as Wassermann’s reaction. In the field of public health he was an active fighter for improvements of prophylactic measures and more public education about venereal diseases. Professor of dermatology at the University of Leipzig in 1880, he was named Privat-Dozent of that same institution the following year. In 1882 he assumed the post of außerordentlicher Professor (extraordinary professor) of skin and venereal diseases at the Faculty of Medicine of Breslau, where he also was made head of the Department of Dermatology. Ten years later he inaugurated in that city a clinic that became internationally known as a center of research on skin diseases. He died in July 1916, in Breslau, Prussia (now Wroclaw, Poland).

Neoplasm: abnormal tissue growing through cellular proliferation more rapidly than the normal, even after the stimulus that started the process has ceased. Neoplasms are distinct masses of tissue presenting a partial or complete lack of structural organization and functional coordination with the normal tissue. The term “tumor”, literally meaning “inflammation”, is frequently used as synonym of neoplasm. It may be benign or malignant and is observed
in all the tissues: there are fibrous, lymphatic, vascular, cartilaginous, bony, muscular, nervous and epithelial neoplasm. The probability of its occurrence increases with age and is higher in women than in men; womb, stomach and breast are more affected than other parts of the body.
Sources: D’Elia, 1926; Stedman, 1979.

**Nodose erithema**: acute inflammation of the subcutaneous tissue preferentially attacking the lower limbs. Characterized by the presence of painful, deep and soft nodules originated from the exudation of blood and serum, almost always accompanied by ardency and intense itching. The disease was described for the first time in 1808 by the English dermatologist Robert Willan (1757-1812). In 1860, Ferdinand von Hebra (1816-1880) established its specificity, separating it from the lesions included in the group the multiform erithema. Also known as tuberculous erithema or rheumatic peliosis.
Sources: Cardenal, 1947; Ferreira, 1999; Fitzpatrick, 1971; Larousse, 1971; Houaiss, 2001; Murray, 1910; Stedman, 1979; www.169; www.211.

**North American blastomycosis**: caused by the fungus *Blastomyces dermatidis*, it is characterized by suppurated tumors of the skin (cutaneous form) or by lesions of lungs, bones, subcutaneous tissue, liver, spleen and kidneys (systemic form). Found in men, dogs and other animals, it is not transmissible from person to person. *Blastomyces* spores probably invade the organism through the respiratory tract, when inhaled. The disease starts gradually, with fever, chills and profuse sweating. The individual may show productive cough, chest pains and breathing difficulties. The disease is treated with fungicidal antibiotics (amphotericin B), showing results within a week, the fungus rapidly disappearing. If untreated, the infection slowly worsens and leads to death. It is common in the United States, but very rare in South America. It was described by Thomas Gilchrist in 1894, and for this reason the disease is also known as Gilchrist’s disease or mycosis. (See Blastomycetes).
Sources: Larousse, 1971; www.30; www.34; www.58.

**Nostocaceae**: a family of Cyanophyceae (“blue algae”), characterized by more or less spherical cells united into non-ramified threads, which, when mature, produce heterocysts, either terminal or intercalary, and acynetes. Many species produce mucilage, forming gelatinous masses on humid soil or on water. The term used to have much broader meaning, but it came to be identified with the Order Hormogoneae, in which it is now included.
Oidium or oidia: Obsolete name for certain fungi with Oidiomycetes characteristics, whose hyphal separation results in the formation of rectangular arthrospores (a type of thallospores). Nowadays it is known as the genus Candida. (See Hypha; Oidium albicans).

Oidium albicans: Obsolete name of Candida albicans or Monilia albicans. Candida is a very large genus of yeast-shaped fungi, frequently found in nature. It is generally a saprophytic fungus, but may become pathogenic, causing the infection called candidiasis or moniliasis, resulted from the alteration in the equilibrium of bacterial flora of the organism or after the ingestion of certain antibiotics. It attacks mainly the region of the mouth, oropharynx, vagina and gastrointestinal tract.

Oidium lactis: Obsolete name of a species of fungi very much used in the fermentation of milk for the preparation of several types of cheese. It is characterized by whitish spots exhaling a typical odor of mold. Nowadays known as Geotrichum candidum, this species may cause lesions in human digestive and pulmonary tracts.
Sources: Dorland, 1947; Fortes, 1958?; Jackson, 1920/1935?; Stedman, 1979; www.50; www.120.

Ophüls, William: Born in 1871, Ophüls was professor of pathology and Dean of Stanford School of Medicine from 1916 to the date of his death, on April 27, 1933.
Sources: www.90.

Orthopnea: respiratory difficulty that obliges the patient to keep standing or sitting in order to breathe. It is generally related to pulmonary diseases causing valvular pneumothorax and pleuropulmonary congestion, but may also follow from heart problems such as pericarditis.
Sources: Cardenal, 1960; Paulier, 1882.
ADOLPHO LUTZ — OBRA COMPLETA

Vol. 1 — Suplemento
Papula: a small, solid elevation formed on the skin, without pus or serosity, which dries out soon after it started. Generally pinkish, papula is constituted by the infiltration of the superficial or papillary layer of dermis; it disappears through desquamation, without leaving scars.

Papulous eczema: dermatitis caused by the eruption of isolated or aggregated red papulae, with intense itching.
Sources: Cardenal, 1960; Stedman, 1979.

Pellagra: a term whose original meaning was “rough skin”; it designates a disease also known as endemic erythema, Lombardian, Italian or Asturian leprosy, Italic elephantiasis, Saint Ignatius itching, maidism, rose disease or maidic psychoneurosis. An infirmity caused by the appearance of pruriginous erythematos spots on the face, neck and hands, spots covered by blisters that dry out and peel off. These cutaneous manifestations are associated with digestive disturbances (red tongue, aphthous stomatitis, signals of gastritis, diarrhea, constipation), as well as mental disturbances that may evolve to madness. Formerly very common, nowadays it is rare, mostly occurring in poor regions. It is now known that pellagra is caused by a shortage of niacin and vitamin PP. Such substances are found in fresh meat, yeast and in many other proteic foods. Individuals feeding mostly on corn and its derivatives have a shortage of niacin and tryptophane, thus being predisposed to suffering pellagra. Known since Antiquity, the disease was described by the first time in 1735 by Gasper Cajal, but only in 1912 Casimir Funk related pellagra, as well as beriberi and scurvy, to alimentary deficiency. According to D’Elia (1926), in the beginning of the 20th century, at least two theories about the etiology of pellagra disputed primacy: one attributing the disease to the excessive ingestion of corn and the other considering the action of a still unknown parasite. The obnoxious
influence of corn continued to be maintained by many authors in the 1920's; unhealthy housing, excessive labor and heredity were also considered factors that predisposed to the disease. In 1920, North American doctor Joseph Goldberger (1874-1929) demonstrated that pellagra had a nutritional origin and was not a parasitic infection or disease. During a trip to southern United States, Goldberger observed people in asylums, hospitals and orphanages in order to verify how they acquired the disease. He verified that the absence of tryptophane in the alimentary diet of the patients caused the disease and suggested the ingestion of milk and eggs as a preventive measure. In 1926 Goldberger discovered the anti-pellagra factor in many other foods. Later studies have shown that corn is poor in tryptophane, pyridoxine and riboflavin, which explains why pellagra decimated populations whose alimentation was mainly based on that grain. Following the model defined by Goldberger, now the disease is treated by including proteic foods in the patient’s diet and avoiding starch foods, especially those derived from corn.


**Pemphigus**: designation common to a potentially deadly group of dermatoses due to an unknown cause, characterized by the appearance of blistery eruptions over the skin, which, when absorbed, leave fragmented pigmented spots. Cutaneous lesions in the shape of blisters have been described since the Antiquity, but the term pemphigus was only employed in 1760 by the French doctor and botanist Boissier de Sauvages de la Croix (1706-1767). The disease described by Sauvages was probably a case of multiform erythema, as there was continuous high fever and it lasted for approximately two weeks. The concept he gave was of a blistery eruption of short duration. Sauvages' definition was accepted by the contemporary medical circle up to 1791, when Johann Ernst Wichmann (1740-1802) gave to pemphigus its modern meaning, i.e. of a chronic blistery disease; for eruptions with a short duration he suggested the name febris bullosa. Wichmann was the first to describe a proved case of vulgar pemphigus. In the ensuing years, the concept underwent many alterations, many times almost undifferentiated from those formulated for other vesicular lesion. In 1860, Ferdinand von Hebra (1816-1880) denied that pemphigus could manifest itself in acute form and again established Wichmann's definition, which lasts up to now. In the pemphigus-group different clinical manifestations are included, standing out the vulgar, the foliaceous and the vegetative forms. (See Foliaceous pemphigus).


**Peptone**: a water soluble substance derived from animal and vegetable proteins (meat, milk, soybean, etc.), obtained during gastric and pancreatic digestive process. Often used for cultivating bacteria.


**Periadenitis**: the inflammation of tissues near a gland, mainly observed as a complication of adenitis (inflammation of the lymphatic ganglia or of a gland). (See Adenitis).
Phenacetin or Acetophenetidine
\[C_{10}H_{13}O_2NO_2\]: acetic amide used as analgesic, anti-pyretic and anti-rheumatic. Indicated for combating typhoid fever, flu, pneumonia, tuberculosis, rheumatism and diverse types of neuralgias. It must be carefully administered, as it has a highly toxic effect upon the kidneys.

Pyrogallic acid \(\text{C}_6\text{H}_3(\text{OH})_3\): the same as pyrogallol; a substance obtained from gallic acid. It has multiple chemical and medical applications as anti-pruriginous and, externally, in the treatment of psoriasis, microsporic scurf and other cutaneous affections.
Sources: Houaiss, 2001; Stedman, 1979.

Pityriasis: generic designation of dermatoses characterized by erythema and fine desquamation. In the beginning of the 19th century Robert Willan and other founders of dermatology employed the term to designate a heterogeneous group of skin diseases whose common denominator was the occurrence of small dry scales. Afterwards, slight forms of dermatites came to be designated as pityriasis rosea or Gilbert’s pityriasis, pityriasis rubra pilaris; lichenoid, pityriasis versicolor (later on called tinea versicolor) and pityriasis nigra (name given by Hebra to chronic pediculosis). In D’Elia (1926), pityriasis is defined as the dermatosis caused, in several parts of the body, by parasites of the family Pediculidae (Order Anoplura), among them included human lice.
(See Pityriasis circinata marginata; Vesicular pityriasis).

Pityriasis circinata marginata: also known as pityriasis rosea, pityriasis maculosa, pityriasis maculata or Filbert’s pityriasis rosea. Medical literature from the last two centuries registered reports of disorders apparently identical to that described by French dermatologist Camille-Melchior Gibert (1797-1866) as pityriasis rosea in his *Traité Pratique des Maladies de la Peau et de la Syphilis*, 1860. Other names were given to this disease by Pierre-François-Olive Rayer (1793-1867); *erythema annulatum*; Ferdinand Ritter von Hebra (1816-1880); *herpes tonsurans maculosus et squamosus*; Erasmus Wilson (1809-1884); *lichen annulatus serpiginosus*; Horand: pityriasis circinata; Alfred Hardy (1811-1893); disseminated pityriasis; Jean-Baptiste-Emile Vidal (1825-1893); *pityriasis circinata and marginata*; Pierre-Antoine-Ernest Bazin (1807-1878); *pityriasis rubra* and acute disseminated pityriasis; Ernest Henri Besnier (1831-1909); *erythrodesquamative pseudexanthema*; Robert Willan (1757-1812); *roseola annulata*; Behrend: *roseola furfuracea herpetiformis*; Nicolas and Chapard: *roseola squamosa*. The disease is characterized by papulas and scaly plates, oval or rounded, of a bronzy-rose or salmon color, that rapidly appear on the trunk, neck, arms and legs, rarely on the face. Several aspects of this self-limited, papulo-scyal affection are unique: first, the generalized eruption is frequently preceded, by a few days or a week, by a single larger lesion, called “forerunner spot” (“mother plate” or “master plate”), often erroneously identified as dermatophytosis. The master plate, present in 50 to 90% of the cases, may appear on any place, but generally occurs on the neck or the
lower part of the trunk, reaching a diameter of a few centimeters. The second singular characteristic: the oval lesions possess white scales, uncommonly slender, forming a small collar near the plate’s borders. Thirdly, the lesions follow the cleavage lines of the skin, forming a pattern comparable to a Christmas tree. The affection has a spontaneous involution within one to two months. Pruritus may be a marked symptom. Sometimes pityriasis rosea is preceded by a slight infection of upper respiratory areas and its greater incidence is in the winter months, suggesting a viral etiology. However, the disease does not occur in endemic form and is not transmitted interpersonally. Most cases attack children and young adults 10 to 35 years old. Occurrences are rare. Treatment for pityriasis rosea is generally unnecessary, although topical corticosteroids and anti-histaminics may alleviate the erythema. Ultraviolet light frequently reduces the eruption. Cardenal (1947) attributed the cause of the disease to a fungus of the genus Microsporum; Staphylococcus albus. Spirochetes have also been incriminated, whereas other authors have suggested a possible viral cause, a hypothesis still being studied (Freedberg, 1999). Up to now the etiological agent of the disease has not been isolated. Pityriasis rosea is considered a cutaneous affection of unknown origin. (See Pityriasis; Vesicular pityriasis).


Pleurisy: acute or chronic inflammation of the pleura, generally from bacterial origin. It appears in most cases as a consequence of pneumonia, tuberculosis or other infectious diseases. In pleurisy, both surfaces of the pleura become dry and rough, causing friction. The so-called dry pleurisy provokes intense pain that worsens with cough and a deeper inhaling. In pleurisy with blood-shed, the lung is compressed by the accumulation of liquid flowing from the blood vessels towards the pleural cavity. It is normally accompanied by chills, fever, cough and dyspnea. Sources: D’Elia, 1926; Ferreira, 1999; Larousse, 1971; Houaiss, 2001; Koogan-Houaiss, 2004.

Pneumonia: acute or chronic inflammation of the lungs, potentially fatal and contagious, caused by bacteria, viruses or fungi, but it may also be of allergic nature or due to irritation by chemical substances. Its characteristic symptoms are chills, pain in the chest, cough, catarrh, high fever and breathing difficulties. It more frequently attacks aging patients and children below five years old. The disease may appear suddenly, following other infirmities, or after a surgery. The several types of pneumonia are defined according to their localization and the extension of the lesion of the pulmonary tissue. From the anatomical point of view, they may be classified as lumbar, segmentary, lobular and interstitial. When lobular pneumonia affects both lungs it is frequently called bronchopneumonia. A bacterial etiology of pneumonia was supported by Edwin Klebs (1834-1913), in 1875. Six years later, Louis Pasteur (1822-1895) identified the bacterium Pneumococcus in the saliva of a patient attacked with rabies. The association of the pneumococcus, or Diplococcus pneumoniae, with lobular pneumonia was established in 1883 by Charles Talamon (1850-1929). Three years afterwards, Albert Fraenkel (1848-1916) and Anton Weichseelbaum...
confirmed and extended Talamon’s investigations, observing the behavior of pneumococcus in culture media and its pathogenic action upon rabbits. During that time the idea that pneumonia was a typically bacterial disease prevailed, with well defined evolution and clinical features. However, studies undertaken from 1930 on revealed the existence of singular cases, whose clinical evolution differed from the established pattern. Moreover, in those cases the presence of bacteria could not be demonstrated. In 1944, Monroe D. Eaton isolated a filterable agent capable of producing pneumonia in rats and hamsters. In the beginning, it was believed to be a virus and the name pleuropulmonary-like organism – PPLO was given to it. Later on, Robert N. Chanock classified it as an intermediary agent between virus and bacterium, belonging to the genus Mycoplasma, species pneumoniae. (See Croupous pneumonia).
Sources: D’Elia, 1926; Ferreira, 1999; Koogan-Houaiss, 2004; Stedman, 1979; Veronesi, 1982; www.189.

Pneumotyphus: typhoid fever beginning with pneumonia, which evolves by itself when pneumonia is about to end. (See Pneumonia).
Sources: D’Elia, 1926.

Posadas, Alejandro: parasitologist, born in Buenos Aires, Argentina, on December 22, 1870. Since he was very young, Posadas suffered from pulmonary and rheumatic ailments that compelled him to abandon his college studies thrice. Entering the Faculty of Medicine in 1888, he studied under pathologist Robert Johan Wernicke’s (1854-1922) orientation. In the University Hospital, in 1891, he had the opportunity to examine a soldier, Domingo Ezcurra, who had recurrent cutaneous nodular lesions diagnosed as fungoid mycosis. In the material extracted from the neoplasmas, Posadas observed the presence of spherical organisms with a thick wall, containing small rounded formations. Because of these characteristics, he identified the microorganism as a sporozoan, the same conclusion Wernicke had reached. Posadas published his discovery in the paper “Un nuevo caso de micosis fungoidea con psorospermia” in the journal Círculo Médico Argentino (1892; 15: 585-97). The term psorospermia was a reference to organisms known at that time as coccids. Also in 1892 Wernicke published in Germany “Ueber einen Protozoenbefund bei Mycosis fungoide”, in Centralblatt für Bakteriologie und Parasitologie (1892; 12: 858-61). Posadas was able to reproduce the disease in laboratory animals, thus proving the presence of the parasite. He was not able, however, to cultivate it. The correct identification of the microorganism, Coccidioides immitis, included in the group Ascomycetes fungi, would be established by Ophüls and Moffit in 1900. Graduating in 1894 with honors and distinction, in the same year Posadas defended his thesis “Psorospermiosis infectante generalizada”, (afterwards called Posadas’ disease or coccidioidomycosis). He accompanied the evolution of the disease in the Argentinian soldier up to the latter’s death in 1897, the necropsy revealing extended visceral lesions. Having traveled to Europe in search of solace for his pulmonary disease, Posadas died in Paris on November 21st, 1902, at only 32 years of age. During his eight-year career, he had other remarkable achievements as a docent, clinician and
researcher. He was the first to film a surgical intervention at Hospital de Clínicas in Buenos Aires and, together with Wernicke, was the first to report a case of rhinosporidiosis.
(See Coccidioidomycosis; Coccidium; Psorospermosis; Wernicke, Robert Johan).

Potassium iodide (KI): a white salt, crystallized into cubes, very soluble in water and alcohol, that melts when exposed to heat. It results from the decomposition of iron iodide by potassium carbonate, or the heating of iodine with potassium or sodium carbonate. Up to the advent of antibiotics, in the 1930’s, when it was substituted by penicillin, potassium iodide was largely employed in the treatment of tertiary syphilis. In the 19th century it was also employed in the therapy of lymphatic tuberculosis and asthma, among other applications. Nowadays it is employed as expectorant and fungicide, being administered in potions, solutions or syrups. It is also utilized in the fabrication of paper and photography revealers.
(See Iodine; Syphilis).
Sources: Lello, 1942; Littré & Gilbert, 1908; Paulier, 1882; www.147; www.148.

Psoriasis: a recurrent, non-contagious chronic dermatosis characterized by the eruption of reddish plates covered with white or silvery scales. The lesions show well delimited and varied sizes, from discrete and localized forms to severe forms that may cover the entire body surface. They appear especially on the knees, scalp and trunk. A typically human affection, it equally attacks men and women of any age. Clinical manifestations are varied. According to their localization and to the characteristics of the lesions, they are classified as vulgar, palmo-plantar, arthropathic, erythrodermic, and other less important forms. Vulgar psoriasis, responsible for 90% of the cases, is the best known of them. Typical form of the disease, it is rarely pruriginous and may also attack nails. In the palmo-plantar modality, lesions are located on the sole of the feet and on the palms of the hands. The skin becomes hard, dry and frequently presents cracking.
Arthropathic psoriasis appears suddenly, causing pain in the tips of fingers and toes and in the large joints. In some cases, it may affect the joints. The erythrodermic form shows generalized lesions over almost all the body. Confounded during a long time with leprosy, psoriasis was described for the first time by Robert Willan (1757-1812) in his On cutaneous diseases (1808). The cause of the disease is still unknown, but it is admitted that it is related to some genetic predisposition and to factors such as cutaneous traumas (Koebner’s phenomenon), infections, use of medications and emotional stress. Although no treatment may lead to permanent cure, lesions disappear or show a sensible regression when treated. Therapy depends upon the patient’s clinical condition. In less severe cases hydration of the skin and exposure to the sun are recommended,
combined with the topical use of creams and ungents based on cortisone, vitamin D, coal tar and antraline. In severe cases systemic or orally administered medications are prescribed. More recently laser therapy has been used. Psoriasis is also known as psora or alías, terms of Greek origin meaning, respectively, “mange” and “white”.

(See Leprosy).


Psorosperms: according to Murray (1910), certain unicellular organisms belonging to the group protozoans of the Order Myxosporidia were thus called. The following properties characterize them: they multiply by fission and each one of the organisms thus generated is surrounded by a firm layer forming a spore that remains enveloped in a capsule or cyst; each spore may again divide into small bodies that, finally, develop into larger mature individuals. It was considered that the complete developmental cycle of these organisms was not limited to man (in which it would cause psorospermosis), but also parasitized other hosts. In more recent dictionaries, psorosperm is defined as a minute parasite, generally the young form of gregarines, an order of protozoans that parasitize animals such as earthworms, lobsters etc.

(See Psorospermosis).

Sources: Cardenal, 1960; Murray, 1910.

Psorospermosis: morbid state due to psorosperms. According to Murray (1910), the term was used to name human lesions caused by certain forms of protozoans (Sporozoa) e by Coccidium that affect also the bile ducts of rabbits. Darier’s disease (keratosis follicularis), Paget’s disease (a rare form of breast cancer), certain carcinomas and molluscum contagiosum, diseases now known to have very different etiologies, have been described as caused by psorosperms. According to the same source, infection in man could attack all the viscera in rare cases, or only the liver, the urinary tract, or the skin, on which nodular or vesicular lesions spread. When infection was generalized, the patient’s condition was compared to trichinosis. Symptoms included pains in the limbs, vomit, headache, delirium, somnolence and fever. Death generally occurred in the period of fifteen days to a month, the patient undergoing a “typhoid phase”. There was not, then, any treatment for the infection and diagnosis could only be made by discovering the typical cysts and the parasites. Coccidioidomycosis, a disease caused by fungi of the species Coccidioides immitis, also known as Posadas’ disease, was originally described by this Argentinian doctor in 1892, as “nuevo caso de micosis fungoidea con psorospermia”, this last term alluding to the similarity of the forms found in that mycosis with protozoans (“coccids”). In Dorland (1947), psorospermosis is defined as a morbid state due to the presence of those myxosporidian microorganisms. In more recent medical dictionaries this condition is no longer described. Darier’s disease, a rare and hereditary disease of the skin, still has as a synonym follicular psorospermosis, but without any relation with the etiology, which is still unknown (microscopic studies suggests a defect of synthesis, organization or maturation of the complex that controls normal keratinization).

(See Psorosperms).

Pulmonary emphysema: a disease characterized by the permanent increase of the aerial spaces localized beyond terminal bronchioles, either by dilatation or by destruction of alveolar walls. The lesion of the small aerial sacs, through whose walls oxygen penetrates the blood and carbonic gas is liberated, makes some patients present bluish skin, as the oxygen rate in the blood becomes less than normal. Emphysema may inhibit up to half the functional capacity of the lungs before the patient perceives that something is seriously altered in his organism. Most times the disease begins with a pulmonary infection called chronic bronchitis, and is discovered through a radiographic exam of the thorax, to see the state of the heart or of the lungs. The patient finds exhaling specially difficult. Other symptoms are frequent flues, cough, excess of mucus in the throat, indigestion and short breath. The disease mostly affects people of the masculine gender, 40 years old or more. Emphysema causes the loss of elasticity of the pulmonary tissue and the permanence, in the lungs, after each respiration, of residues of carbon dioxide that intoxicates the organism, robbing space from inhaled oxygen; the heart has to work more, so that a sufficient quantity of oxygen may be incorporated to the blood, generating, in many cases, a cardiac affection capable of leading the patient to death. The number of affected people among smokers is thirteen times as great as among non-smokers. Air pollution also has its influence, epidemics of emphysema having been registered in London and in industrial valleys in Belgium and Pennsylvania in the United States. Heredity may also be an etiological factor, and we now know that about one fourth of the patients show the lack of an enzyme called alpha-antitripsin, which protects the lungs against infections. Emphysema has no cure, but those who start treatment as soon as it begins have long and reasonably active lives. The medical resources available for emphysema are medicaments, hormones, pumps for introducing oxygen under pressure in the lungs and, and in extreme situations, lung surgery. According to D’Elia (1926), one of the most active remedies used at that time to attenuate breathing difficulty was potassium iodide (0:50 by 1, per day) associated or not to arsenic.


Pyrogallic acid \([C_6H_3(OH)_3]\): the same as pyrogallol; a substance obtained from gallic acid. It has multiple chemical and medical applications as anti-pruriginous and, externally, in the treatment of psoriasis, microsporic scurf and other cutaneous affections.

Sources: Houaiss, 2001; Stedman, 1979.
Quebracho: popular Portuguese name for several native plants of South America, belonging to different genera and families, whose hard and resistant wood presents high concentration of tannin, a substance much employed in the tanning of hides. In Brazil, the term is applied to diverse plants of the genera *Schinopsis* and *Aspidosperma*. The name “quebracho”, also employed as synonym of “quebracho-vermelho”, comes from the Spanish and means *ax-breaker*, an allusion to the hardness of its wood. (See *Aspidosperma*; *Quebracho-colorado*).


Quebracho-colorado: the same as “quebracho-vermelho”. Name common to several trees of the genus *Schinopsis*, family Anacardiaceae, whose main characteristics are the bark rich in tannin and the reddish, hard bark. The species *S. lorenzii*, found in Brazil, Paraguay, Argentina and Uruguay, is a tree about 20 meters heigh, with reddish-brown bark, elliptical leaves, very ramified panicle and ligneous samarae. (See *Quebracho*).


Quincke, Heinrich Irenaeus: German medical doctor born in Frankfurt an der Oder on August 26, 1842. His family then moved to Berlin, where his father made a brilliant career as a clinical doctor. Heinrich Quincke studied medicine in Würzburg, Heidelberg and Berlin, with famous teachers such as Albert von Kölliker (1817-1905), Hermann Helmholtz (1821-1894) and Rudolf Virchow (1821-1902). In the latter city he obtained his MD in 1863 and, two years later, went to Vienna to work under the physiologist Ernst Wilhelm Ritter von Brücke (1819-1892). Quincke was the assistant of many other important scientists and soon came to occupy the chair of general clinic at Berne (1870). From 1874 on, he dedicated himself to surgical...
interventions in lungs. Four years afterwards, he assumed the chair of general clinic at Kiel, where he remained for three years, until retiring as Emeritus Professor of that discipline. He then went to Frankfurt am Main, and continued lecturing as honorary professor, dying in that city on May 19, 1922. He had a very important role in the research of tuberculosis, creating techniques of drainage of the pulmonary abscess to allow patients’ expectoration. He also investigated the mechanisms controlling body temperature, developing a theory about the central nucleus, responsible for the warming of the entire organism. His greatest contribution to medicine, however, was the pioneer use of the lumbar region puncture for the diagnostics and treatment of pulmonary diseases. He also made important observations on the expansion of the hepatic artery (1870). (See Quincke’s aedema).

Sources: Landouzy & Jayle, 1902; Stedman, 1979; www.132; www.141.

Quincke’s aedema (or disease, or syndrome): a cutaneous infirmity developed in sporadic or hereditary form, attacking both sexes. It begins with the sudden appearance of pain and swelling in the facial region, feet and genital organs, persisting for two or three days, when it finally disappears. It may also cause strong abdominal pains and even fatal respiratory complications. Marcello Donati was the first to describe this kind of aedema, in 1586, but only during the 19th century the edematous urticaria, as the disease is also known, was studied by the British surgeon and dermatologist John Laws Milton (1820-1898). In 1882 Heinrich Irenaeus Quincke also described it; twelve years later it was studied by Henry Martyn Bannister (1844-1920).

(See Quincke, Heinrich Irenaeus).

Sources: Landouzy & Jayle, 1902; Stedman, 1979; www.132; www.141.

Quinine or “quinine salt” [C_{20}H_{24}N_{2}O_{2}]: alkaloid composite in the form of white, inodorous powder with bitter taste, extracted from bushes of the genus Cinchona, used as a stomachic and oxytocic agent, as analgesic, antipyretic, flavoring of tonic water, for muscular relaxation, to combat atrial fibrillation and in the treatment of malaria. It has proved very efficient against the forms of impaludism caused by Plasmodium ovale or Plasmodium vivax. Quinine is also employed in brain malaria, in malaria produced by chloroquine-resistant strains of Plasmodium falciparum and in crises of malignant tertian malaria. Cardenal (1960) presents a somewhat different formula of it (C_{20}H_{24}N_{2}O_{2}+3H_{2}O) from the consulted sources, adding that the substance is used in the form of salts – bromhydrate, chlorhydrate, phosphate, salicyllate, sulphate, etc. Those salts, according to the same source, either incite the nervous system and render the pulse slower, when administered in small doses, or provoke cerebral congestion, deafness and dizziness when taken in higher dosages. The substance was already known by the Incas at the time of the conquest of the Americas by the Spanish Crown, and it is known that the Jesuits were the first to describe the prophylactic properties of the bark of the Cinchona tree, used by Peruvian aborigines in the most varied febrile manifestations. In 1820, the French chemists Joseph-Bienaimé Caventou (1795-1877) and Pierre-Joseph Pelletier (1788-1842) were able to isolate the active principle of quinine, allowing the large scale industrial production of the chemical, an object of great disputes during World War II.
Resistance to the components of this substance led to the adoption of substitutes such as chloroquine and primacrin in malarial treatment.

Rhinoscleroma: a chronic granulomatose process attacking the nose (the starting point of the infection), upper lip and upper respiratory areas. It generally starts with the growth of hard and smooth nodules, painful when pressed, that spread towards the pharynx, larynx, and bronchi, and may even involve the external acoustic meatus. Surprisingly, the sense of smell remains intact. Skin becomes pale, anemic, or dark-violet, and rich in superficial vascular nets, deprived of hairs and follicles. It is believed that rhinescloma is due to a specific bacillus, possibly a strain of Klebsiella rhinoscleromatis, described by Viennese surgeon Anton von Frisch (1848-1917). According to D’Elia (1926), therapy was surgical and symptomatic and the results only temporary, as the affection constantly presented relapses. Nowadays streptomycin is successfully used in the treatment of the disease.


Rixford, Emmet: Canadian surgeon born in Quebec in 1865, died in the United States in 1938. He graduated at Cooper Medical College, in San Francisco in 1891, becoming associate professor of that institution in 1893; five years later, he was promoted to full professor. In 1909 he became professor of surgery at Stanford University. Rixford was one of the first physicians to observe a case of coccidioidomycosis. As a homage to this fact, his name was given to a mountain in Sierra Nevada. (See Coccidioidomycosis).

Fonte: www.52.
Saccardo, Pier Andrea: Italian mycologist, born in Treviso in 1845 and died in Padua in 1920. He obtained his MD in 1867 from Padua University, of which he became professor of natural history two years afterward. In 1879 he changed to lecturing botany and assumed the direction of the botanical garden of that university. His major contribution to mycology was the publication of the atlas *Sylloge fungorum omnium husque cognitorum* (1882-1913), a collective work in 11 volumes, containing descriptions and illustrations of all the fungi known until then.


Saccharomyces: a genus of Ascomycetes, fungi or yeasts belonging to the family Saccharomycetaceae, whose type is beer yeast (*Saccharomyces cerevisiae*). Similar yeasts are used in the production of other alcoholic drinks and bread. *Saccharomyces* possesses a predominantly unicellular stem, reproduces asexually by budding, transverse division or both, produces ascospores, but is devoid of mycelial filaments. One member of this genus, *S. neoformans* (ancient name of *Cryptococcus neoformans*) was isolated from the fermented juice of peaches by Italian microbiologist Francesco Sanfelice in 1894; soon afterwards, it was verified that it was the agent of human cryptococcosis. Certain sources cite saccharomycosis as synonym of blastomycosis, as the fungi of the genus *Saccharomyces* figure among the agents of this group of infirmities. (See Cryptococcosis; *Cryptococcus neoformans*; Fungus).

Sources: Cardenal, 1960; Stedman, 1979.

Saccharomyces albicans: a fungus formerly placed in the genus *Saccharomyces*, now known as *Candida albicans* (*Monilia albicans*), parasitic on animals, found in several parts of the human body, especially in the gastrointestinal tract, the oropharynx and other muco-cutaneous regions. The bacteria living in the intestine normally
prevent the proliferation of the fungus. However, if the equilibrium is disturbed by antibiotics or any disease, the fungus develops and produces an affection called mugget, candidiasis or moniliasis, characterized by white plates that spread inside the mouth, the vagina and sometimes the anus. (See *Oidium albicans*).

Sources: Cardenal, 1960; D’Elia, 1926; Stedman, 1979.

**Salicylic acid** [HOC₆H₄COOH]: acid used in medicine, in pharmaceutical industry and the industry of dyes. It is used topically as ceratolythic (descaling), antiseptic and fungicide. According to Murray (1910), this acid was also used as anti-pyretic.

Sources: Houaiss, 2001; Stedman, 1979.

**Scabies or Mange**: known in Brazil as *coruba* or *curuba*, *já-começa*, *jareré*, *jereré*, *pereba*, *pira* or *sarna*. A contagious cutaneous disease affecting man and other animals, caused in the latter by several kinds of mites and in the former by *Sarcoptes scabiei*. It is transmitted by direct contact with the infected skin, during sexual relations or the common use of clothes. The male parasite opens cavities in the skin and there the female lays her eggs, which eclobe within seven to ten days afterwards, generating new parasites. Scabies occurs in men and women of whatever age and is not always associated with bad hygienic conditions. It manifests itself through intense itching, papulae, vesicles and wounds, which may spread over the abdominal region, arms, genitals and legs. In animals it infects abdomen, legs, breast and ears, and may cause the definitive or temporary loss of hairs (alopecia). Treatment is made orally and through topical applications, the isolation of the patient being recommended. Moreover, all clothes must be substituted daily, including bath and bed clothes. There exists one type of itch, the “Norwegian itch”, whose degree of infection is very high and whose symptoms are more severe than usual, with intense scaling. It is estimated that every year about 300 million cases of scabies appear in the world; its pathogenic agent has been known for at least 2,500 years.


**Scarlet fever**: an infecto-contagious pathology, characterized by the appearance of a reddish or scarlet erythema (hence the origin of the name), of enanthema of the mucous membranes, principally on the internal
side of cheeks and pharynx, besides high fever and generalized descaling. It is caused by *Streptococcus scarlatinae*, a beta-hemolytic streptococcus of the A group. The disease may appear at any age, but it affects principally children and requires therapeutic intervention, nowadays on the basis of antibiotics. Its clinical picture involves a four day incubation period, angina and pyrexia by the end of 24-48 hours, cutaneous eruptions around the neck and loins; descaling of the skin between the seventh and eighth days, the surging of plaques along several weeks and alteration of the mouth’s mucous membrane. In more serious cases, the abscesses last for a longer time, and sometimes it is accompanied by rheumatism, otitis and nephritis. Cardenal (1960) classifies the disease into: “ambulatory”, a benign form, with no fever; “anginous”, indicated by the exasperation of pharyngeal symptoms; “apyretic”, with benign evolution of the initial symptoms and a slightly feverish state; “hemorrhagic”, with blood elimination in the skin or urine; “latent”, with absence of cutaneous eruption, but evolution of pharyngeal angina and nephropathy; “malignant”, in which the severest symptoms are intensified, producing great physical weakness; “nervous”, form in which convulsions and cerebral symptoms predominate; and, finally, “papulous”, with the appearance of papulae. Scarlet fever epidemics have been known since Antiquity, having been described by Hippocrates in the 5th century b.C., and by Cornelius Celsius in the first century of our era. Up to 1676, when Thomas Sydenham (1624-1689) established definitively the distinctive characteristics of the infirmity, it was considered as a variety of measles or smallpox. It streptococcic origin was identified by Friedrich Loefler (1852-1915) and confirmed by Klein in 1886. In 1923, North-American microbiologists Gladys Rowena Dick (1881-1963) and George Frederick Dick (1881-1967), in collaboration with Alphonse Dochez (1882-1964), evinced the specific etiology of the disease when they experimentally reproduced it in humans. Sources: Cardenal, 1954; Cardenal, 1960; D’Elia, 1926; Larousse, 1971; Houaiss, 2001; Schreiber & Mathys, 1991; Stedman, 1979; www.99; www.100; www.101; www.121; www.5.

Schenck, Benjamin R.: North-American surgeon (1873-1920) born in Syracuse, New York. Graduated in 1898 at John Hopkins Medical School, he dedicated himself to the practice of gynecology in Detroit, from 1903 on. He was a gynecologist of Harper Hospital and associate professor of the State Medical Society in 1906, a position occupied up to 1919, when health problems forced him to move to California, where he died, victim of tuberculosis. We owe him the discovery of Schenck’s disease, a gummatous lymphangitic form of sporotrichosis. (See Sporotrichosis).

Sources: Stedman, 1979; www.12.

Schizomycetes: name used in ancient systems of classification to designate a division of the Vegetable Kingdom encompassing all the bacteria. In 1857, for instance, Carl von Nägeli, a botanist from Munich, united several genera of bacteria in a group called by him Schizomycetes, placing it next to colorless primitive plants, i.e. mushrooms. In botany, bacteria is a synonym of Schizomycetes. Under this denomination were included the unicellular plants devoid of chlorophyll, reproducing by simple division, such as bacteria and blue algae (Cyanophyceae). In the 19th century the term was the
subject of debate, in the wider controversy on the nature of bacteria. (See Bacteria; Fungi; Mushroom).


Schrön, Otto Carl Gottlieb von:
German doctor born in Hof, Bavaria, on September 7, 1837. He studied medicine at the Universities of Erlangen and Munich and in 1864, after obtaining the doctorate, was invited by Professor De Filippi, from Turin, to come to Italy to make the preparations and drawings of anatomy that had rendered him famous. One year later he became professor of pathological anatomy at Naples University, and in this city he died on May 13, 1917. Schrön has his name associated to an acid-resistant bacillus found in the egg germinative spot (Schrön's granule).

Sources: Cardenal, 1960; Dorland, 1947; www.228; www.166; www.42.

Scleroma, sclerema or scleroderm: a small, hardened and circumscribed area occurring especially in the tissues of the nose and larynx, but also in other regions of the skin and the mucous membranes.


Silver nitrate [AgNO₃]: in medicine it has been used in the treatment of epilepsy, chorea, tabes and dysentery. In more or less diluted solutions, it was applied externally in cases of blenorrhagia, of simple, granulose or purulent conjunctivitis and yet as a caustic and antiseptic substance. Internally, it was applied in cases of chest angina, hemiplegia, diabetes, affections of the digestive tract (gastritis, dyspepsia, gasstralgy, cholera), including expulsion of worms.

Sources: Cardenal, 1960; Paulier, 1882.

Simple Pneumonia: pneumonia affecting only one of the lungs. (See Pneumonia).

Sources: D’Elia, 1926.

Sodium salycillate: salycillate is an ester or salt originating from salycilic acid (amonium, bismuth, mercury, etc.) found in aspirin or other medicines used to combat pain and fever, as well as anti-acids, anti-diarrhoeics and solutions for the removal of corns or warts. Excessive doses of sodium salycillate, above 200 to 500 mg, may cause collapses, convulsions, diminution of the respiratory capacity and of blood pressure, several neurological disturbances, nausea, gastrointestinal bleeding, somnolence, vomit, ear buzzing and other symptoms. Treatment must especially fall upon the attenuation or elimination of the acid effect of the salycillate upon the organism.


Soft chancre: also known as chancroid, simple venereal cancer, Ducrey’s ulcer, soft ulcer, simple venereal ulcer, or, popularly, in Brazil, as “cavalho” (horse). It is a typically human, acute infection, sexually transmitted, caused by Haemophilus ducreyi, a Gram-negative coccobacillus, with rounded ends, of difficult growth in culture media (even under ideal conditions, only 65% of them have the expected growth). It was only in 1900 that Fernand Bezançon was able to cultivate this microorganism in media composed of gelose and rabbit blood. The etiology of soft chancre was the subject of intense disputes up to the second half of the 19th century. While some authors maintained its identity with syphilitic chancre, others affirmed that they were dealing with a new pathology, originated by a proper germ.
The specific characteristics of the disease were established by Léon Bassereau (1810-1887) in his *Traité des affections de la peau symptomatiques de la syphilis* (Treatise of the symptomatic affections of syphilis in the skin), and by Phillippe Ricord (1800-1889), in his “Lettres sur la syphilis” (addressed to the chief editor of the *Union Médicale*), both published in Paris in 1852. In 1889, the Italian doctor Augusto Ducrey (1860-1940) isolated the causative agent of the soft chancre and was able to reproduce in man the typical ulceration and all the stages of the infirmity. In that same year, Ducrey’s experiment was reproduced in monkeys by Charles Nicolle (1866-1936). The existence of the bacillus was also corroborated by Primo Ferrari and Mannino De Luca, in 1889, and by Paul Gerson Unna (1850-1929), in 1892.

The disease attacks especially external genitalia, but may also compromise anus and, more rarely, lips, mouth, tongue and throat. Characterized by ulceration accompanied by infectious adenitis and ganglionar abscess, this affection is clearly dominant in the male gender, but also occurs in women. Contagious by inoculation, it is disseminated by the pus generated at the infected place. From four to five days after coition, an inflammatory papula appears, evolving, after two or three days, to a very painful typical ulceration, which may be multiple, but in most cases simple. Although there is an association between soft chancre and syphilis in about 10% of genital ulcers, in the case of soft chancre, ulcers appear under a non-hardened (soft) consistency, with well-defined, upright, reddened rim, over a dirty, purulent ground with fetid odor. Differently from syphilitic ulcer, chancroid does not cicatrize spontaneously. There is no serological test available for testing it; diagnosis is made clinically, through the identification of the characteristic ulcer that appears soon after the suspect sexual contact. With the early use of antibiotics there occurs no progression of adenopathy, but in untreated cases it may evolve into suppuration and fistulization through a single orifice. The first medicines used, already in the era of antibiotics, were sulfas and then tetracyclins. The cost of treatment is high, because it uses expensive medicaments, rendering it difficult in poor countries like Brazil. The use of erythromycin, furnished by the public health service, is a good option for all cases of the disease. Due to its nature, sexual partners must be treated together. Vaccines against soft chancre are being developed. Considered as the main sexually transmissible disease before the advent of antibiotics, it continues to be the commonest genital ulcer in developing countries. After the introduction of sulfonamides there has been a steep decrease of its incidence, but registered cases tended to increase in certain countries by the end of the 1960’s. The disease remains endemic in many regions where social and economic conditions are precarious, prostitution having an important role in its dissemination.

(See Chancroid; Syphilis).

Sources: Bier, 1957; Brouardel & Gilbert, 1896; Cardenal, 1960; Dorland, 1947; Houaiss, 2001; Murray, 1910; Stedman, 1979; Veronesi, 1982; Wyngaarden, 1992; www.78; www.79; www.80; www.175.

Sommer, Baldomero: Argentinian doctor born in Buenos Aires on March 21, 1857, died in the same city on April 18, 1918. The son of a German mother and Danish father (a famous hat maker in that city), Sommer obtained his doctorate in 1874 and strived to increase the knowledge, prevention and
cure of hanseniasis. Hospital Baldomero Sommer, one of the most important Argentinian hospitals dedicated to the treatment of that disease, bears his name by a Decree from July 11, 1947. The Argentinian physician was the secretary of the First International Conference on Leprosy, held in Berlin in 1897. He participated in the Latin-American Scientific Congress held in Montevideo the following year, writing down the deliberations concerning leprosy. He was also honorary president and promoter of the First National Conference on Leprosy in Buenos Aires, in 1906. Three years later, he was the representative of the Argentinian Government in the Second International Conference on Leprosy, in Bergen. Sommer is considered one of the main creators of the “Argentinian dermatological, leprological and syphilographic school”; around 1892, he created and directed that chair in the Faculty of Medical Sciences at Buenos Aires. In 1907 he founded the Argentinian Society of Dermatology, the first institution of that kind in Latin America. He would also participate as foreign or corresponding member in the dermatological societies of Paris, Berlin, Rome and Rio de Janeiro. He was also head of the service of skin diseases of Hospital de Niños, founded in Buenos Aires on April 30, 1875. In 1892 he occupied the same position in Hospital San Roque, now Ramos Mejía. Sommer presided the Argentinian Medical Society in 1897 and in 1912 entered the National Academy of Medicine, of which he was general-secretary in 1918. Public health was another field in which he played an important role. He was “Director de Asistencia Pública” in Buenos Aires and a vocal of the National Department of Hygiene. In the middle of 1910 he was counselor of the municipality. Baldomero Sommer presented a project regarding the pasteurization and obligatory treatment of the milk destined to the inhabitants of the federal capital, a project transformed into law in December 1907. He also took part in the campaign against mosquitoes that began in 1913. (See Leprosy).

Sources: www.13; www.9; www.8; www.266.

**South American blastomycosis:** caused by the fungus *Paracoccidioides brasiliensis*, it is also known as Lutz’s disease or Lutz-Splendore-Almeida’s disease. The inflammatory process is localized in the submucose and presents itself as a non-specific chronic infiltrate, revealing microabscesses and granulomes of the giant epithelioid cells. It reaches the trachea and the lymphonodus. Very often lesions of the oral mucose, larynx and pharynx occur. Cutaneous lesions result from the haemotogenic dissemination of the fungus and are generally related to an infectious process of higher gravity. These lesions, with a polymorph aspect, appear in the face and around the body’s natural orifices such as mouth, nose and anus. Antibiotics, associated with rest, hyperproteic and hypercaloric diet with vitamin supplementation, are important for its treatment, although a total “cure” is still unavailable for bearers of paracoccidioidomycosis, due to the impossibility of eradication of its causative agent. The different therapeutic modalities only decrease the quantity of fungi in the organism, allowing the recovery of cellular immunity and the reestablishment of equilibrium between parasite and host. Paracoccidioidomycosis is an autochtonous systemic mycosis of Latin America. Of an endemic character among populations of rural zones, it attacks mostly individuals of the male gender, 30 to 60 years old, its incidence
being rare in persons below the age of 14. It is important to public health for its incidence in an economically active population and for frequently causing severe consequences preventing individuals of reassuming work. If untreated, it generally leads to obit. For many years the concept that the infection occurred by the implantation of the fungus in the oral mucosa through traumas caused by the habit of chewing different types of vegetables prevailed. Nowadays, the inhaling way is considered the main entrance door of the infection. In 1908, Adolpho Lutz published observations that inaugurated the studies of South American blastomycosis, also known as Brazilian blastomycosis or paracoccidioidomycosis. In that paper, Lutz already separated this disease from the one described by Posadas and Wernicke – the coccidioidomycosis. (See Coccidioidomicose).

Sources: www.3; www.33; www.56.

**Spina or spina ventosa**: bone lesion eventually observed during tuberculosis or osseous cancer, in which the affected bone dilates in greater or lesser degree, as if inflated by gas.

Sources: D’Elia, 1926; Dorland, 1947; Landouzy & Jayle, 1902; Stedman, 1961; Stedman, 1979.

**Spirochaeta pertenuis**: microorganism originally named and described by Aldo Castellani in “On the presence of spirochaetes in some cases of parangi (yaws, *Framboesia tropica*). Preliminary note”, *Journal of the Ceylon Branch of the British Medical Association*, 1905. Through several experiments, Castellani proved that monkeys could be infected with material extracted from persons suffering of yaws, especially their blood. He also demonstrated that, when they were removed by filtration, the material became harmless. Lastly, Castellani showed that it was possible to detect antigens and antibodies specific of yaws by means of the Bordet-Gengou reaction. The bacteria received other names, such as *Spirochaeta pertenuis*, given in 1912 by Lehman and Neumann. Gross, also in 1912, placed that species in the genus *Spironema*, and Macé, in 1913, in the genus *Spirillum*. It is now known as *Treponema pertenue*. It is the causative agent of *piã*, a term of the Tupi (Brazilian indigenous) language meaning “raised skin, tumor”. Patients attacked by this disease (also called *framboesia tropica*) respond positively to Wasserman’s test. *Treponema* is a genus of anaerobic bacteria (Order Spirochaetales) consisting of cells 3 to 8 microns in length, with sharp, regular or irregular spires, without an obvious protoplasmic structure. They are difficultly stained, except with Giemsa’s dye or silver impregnation. Some species are pathogenic and parasite man and other animals, generally producing local lesions in the tissues. (See Yaws).

Sources: Cardenal, 1960; Stedman, 1979; www.61; www.62.

**Splendore, Alfonso**: Italo-Brazilian doctor (Cocenza, Italy, 1871; São Paulo, 1953). Graduated at the Faculty of Medicine of Rome (1897), he worked as an assistant to Angelo Celli in the Institute of Hygiene of that capital. In Brazil, Splendore worked with Adolpho Lutz at Instituto Bacteriológico of São Paulo. When he returned to Italy to serve in his country’s army during World War I (1914-1918), he had already published several important contributions, among them *Toxoplasma cuniculi* (1910), a pioneer work on human toxoplasmosis; *Blastomicose, esporotricose e relações com processos*
afins, a communication submitted to the VII Congress of Dermatology and Syphilography held in Rme (1911); Toxoplasmose de coelhos, presented at the I Congress of Comparative Pathology (1912); Una afezzione micótica com localizzazione nella mucosa della bocca, osservata in Brasile, determinata per fungi (Zymonema brasiliense sp.), published in the Bulletin de la Société de pathologie exotique (1912, 5: 313-319), one of the foundation stones of the discovery of South American blastomycosis, also called Lutz-Splendore-Almeida’s disease. (See South American Blastomycosis). Sources: Larousse, 1971; Stedman, 1979.

Spore: reproducing corpuscle of fungi and of certain species of bacteria. Generally of a unicellular and mononucleate structure, spores are devoid of embryos, possessing the capacity of germinating under certain conditions and of reproducing asexually. Resistant to heat and dessication, they either develop by themselves or after fusion with other spores. Sources: Houaiss, 2001; Ferreira, 1999; Landouzy & Jayle, 1902; Littre & Gilbert, 1908.

Sporotrichosis: a generally benign infection of men and animals caused by fungi of the species Sporothrix schenckii, often limited to the skin and the subcutaneous tissue, which may spread to the bones and internal organs, especially in immune-deficient individuals. Three forms have been described: a disseminated gummatous form (Beurmann’s disease), a gummatous lymphagitis (Schenck’s disease) and an haematogenous form characterized by the presence of multiple abscesses. Distributed worldwide, sporotrichosis especially attacks farmers, horticulturists and other field workers, as Sporothrix is commonly found in rose-trees, gooseberry’s bushes, sphagnum moss and other vegetable matters. The fungus penetrates the body through injuries in the skin of the extremities of the body or the gastrointestinal tract. The initial cutaneous lesion is characteristic: a subcutaneous nodule of elastic consistency, spherical shape and mobile. Once attached to the skin, it becomes reddish and then black, due to the tissue’s necrosis or death. In the following days or weeks, the cutaneous infection spreads through the lymphatic vessels of the hand and arm up to the lymph nodes, forming nodules and ulcers along their course, and may reach the lungs and other tissues. According to D’Elia (1962), the disease began to be studied in the beginning of the 20th century; it was then considered that its agent was a fungus which could live for a long time as saprophytic upon plants, which thus became transmission agents. At that time treatment consisted of internal use of potassium or sodium iodide in high doses (3-5 grams a day), or, in cases of intolerance, in subcutaneous injections of iodated preparations, such as iodated oil, iodone, iodine-gelatin, etc. This treatment was assisted by bitters, by gastric antisepsy and the application of iodated dressings over the ulcerated gummas. Nowadays the infection is treated with oral intraconazol; potassium iodate is also administered, although not so efficacious and capable of causing collateral effects in most patients. (See Beurmann, Charles Lucien de; Schenck, Benjamin R). Sources: D’Elia, 1926; Houaiss, 2001; Stedman, 1979; www.34; www.58.
**Sporotrichum**: a genus of the *Fungi Imperfecti*, similar to yeast fungi, which formerly included *Sporotrichum schenckii*, the causative agent of sporotrichosis in men and animals. Only some species of this genus are pathogenic, such as *S. schenckii*, *S. beurmanni*, *S. dori*, which are also agents of sporotrichosis. (See Sporotrichosis). Sources: Cardenal, 1960; Stedman, 1979.

**Staphylococcus**: a Gram-positive, round-shaped bacterium generally forming irregular agglomerates of cocci similar to bunches of grapes. Potentially pathogenic, these bacteria are motionless, aerobic or anaerobic, and do not develop spores. They may provoke local suppurative lesions, alimentary poisoning and severe opportunistic infections. They are found in skin, cutaneous glands, nasal mucous membranes and in food products. (See Bacteria). Sources: Ferreira, 1999; Houaiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Stedman, 1979.

**Staining**: a stage of the technique for microscopic section preparation, consisting of imbibing them in dyes which fix on certain elements, rendering their observation easier. For animal tissues, the substances used are haematoxylin, eosin and methylene-blue, iodated water, etc.; in bacteriology, especially ammoniacal fuchsine is used (Gram’s method), which divides the bacteria into Gram-positive and Gram-negative, depending on the fixation of the dye. (See Fuchsin; Gram’s method). Sources: Larousse, 1971.

**Stenosis**: congenital or acquired state in which the light, passage or caliber of a natural or organic conduct, as, for instance, the urethra or the heart valves, is much narrower. The expression “diphtheric stenosis” probably designated this anomaly observed in the larynx, trachea or larger bronchi. Sources: Larousse, 1971; Houaiss, 2001; Stedman, 1979.

**Streptococcus**: common denomination of bacteria occurring in groups of small spheres associated in the shape of chains. They are aerobic or facultatively anaerobic. Gram-positive, almost always motionless, and they do not form spores. Generally parasitic upon vertebrates, they are especially localized in mouth, upper air passages and intestines of human beings and other animals. The type-species is *Streptococcus pyogenes*, ethiologic agent of various infectious diseases, described by Anton Rosenbach (1842-1923), in 1884. Other species pathologic to man are *S. pneumoniae* (Klein, 1884; Chester, 1901), causing pneumonia, and *S. aureus* (Rosenbach, 1884), agent of endocarditis and meningitis. Some non-pathogenic species, such as *S. lactis* (Lister, 1873; Lohnis, 1909) and *S. cremoris* (Orla-Jensen, 1919) are used in the fabrication of butter and other dairy products. (See Bacteria). Sources: Ferreira, 1999; Houaiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Stedman, 1979; www.168.

**Strychnine** [C<sub>21</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>]: substance isolated by the French chemists Joseph Bienaimé Caventou (1795-1877) and Pierre Joseph Pelletier (1788-1842) in 1818. It is extracted from the bark and especially from the seeds of plants of the genus *Strychnos*, whose more
dangerous species are *Strychnos nuxvomica*, *Strychnos colubrina*, *Strychnos minor* and *Strychnos toxifera*. According to Stedman (1979), strychnine is an alkaloid from *Strychnos nuxvomica*, presented in the form of colorless crystals of intensely bitter flavor, almost insoluble in water. Having as main characteristic the capacity of stimulating the central nervous system, strychnine is used as stomachic, antidote for depressive toxics and in the treatment of miocarditis. Its therapeutic popularity, however, is undesirable, as it is capable of producing acute or chronic poisoning in men and animals. It is used inclusively to kill rodents. By the end of the 19th century, Paulier (1882) recommended administration of small doses of strychnine as pills, hypodermic injections, unguents, syrups, powder, alcoholic tincture and extract, for gastric problems (dyspepsia, gastric trouble, constipation), affections of the nervous system (asthenic paralysis, hemiple gia, paraplegia), cholera, pellagra, intermittent fevers and other diseases. Sources: Ferreira, 1999; Houaiss, 2001; Paulier, 1882; Stedman, 1979.

Sublimated carbol (C₆H₅OH): a colorless crystallized compound obtained by the distillation of coal pitch. Through the addition of 10% water, it becomes a clear liquid with peculiar odor and pungent taste. It is a powerful germicide, but very toxic. In a 2.5% solution it was used externally in the treatment of wounds and ulcers, and internally in cases of diphtheria and fetid bronchitis. It is also employed, in 5% solutions, as an environmental disinfectant and for disinfecting surgical instruments and the hands of surgeons. In pure state it is caustic and local anesthetics. It was also used as unguent (at 10%). Sources: Cardenal, 1960.

**Syphilis**: an infectious disease of chronic and systemic character, generally transmitted by sexual contact and rarely by feto-placentary contamination (congenital syphilis). It is caused by *Treponema pallidum*, a spirochete attacking man exclusively. For a long time it was confused with gonorrhea and other treponematoses. In 1838 it was individualized by the French dermatologist Philippe Ricord (1800-1899), who classified the clinical evolution of the disease into three distinct periods: primary, secondary and tertiary. In the primary phase, after an incubation period of two to three weeks, a superficial wound appears. In a few days, it evolves towards a resistant and almost painless ulceration called hard chancre, protosyphiloma or primary chancre. The lesion is well delimited, with smooth and uniform surface. It generally occurs on the genital region, being very contagious and almost always accompanied by inflammation of the lymphatic ganglia. It recedes spontaneously within three to five weeks, before or after the beginning of the second phase of the disease. In the secondary period, the dissemination of the infirmity through the blood stream occurs, causing the appearance of lesions on the mucous membranes and of cutaneo-maculose eruptions (syphilitic roseolas) that may extend over the entire body. Lesions appear in about two months after infection. They may be accompanied by high fever, anemia, generalized adenopathy, and pain in articulations. They also recede spontaneously with the increase of immunity. The so-called tertiary syphilis corresponds to the third and last stage of the disease. It is characterized by tegumentary lesion beginning with the appearance of soft nodosities (syphilitic gums) disseminated all over the body, which evolve towards ulceration,
causing damage to the viscera and the cardiovascular apparatus. In some cases the central nervous system is affected, with the occurrence of dorsal tabes, progressive paralysis of limbs or syphilitic meningitis. More rarely, there is the occurrence of extragumentary lesions, including several affections of eyes and bones. Tertiary syphilis manifests itself between the third and the fifth year after infection, in untreated cases. In this phase, the possibilities of transmission are extremely reduced. The geographical origin of syphilis is a much debated question. Some historians consider that it was introduced in Europe by Spanish sailors coming back from the American continent in 1493. Others, on the other hand, maintain that this infirmity would originate in the European continent itself, but that for a long time it remained confounded with leprosy. Anyway, it may be said that the existence of syphilis in Europe was only widely recognized after the epidemics that assailed the continent at the end of the 15th century. The uncertainties about the origin of syphilis are manifest in the several denominations this malady received, associating it to different countries (America, Portugal, Naples, France, Germany, Scotland, among others). The word «syphilis» was invented by the Italian physician and poet, Girolamo Fracastoro (1478-1553), in his poem *Syphilis, sive morbus gallicus*, narrating the history of a fictitious shepard, Syphilus, chastised by the gods with this terrible illness. In 1903, Ilya Ilytch Metchnikoff (1845-1916) and Emile Roux (1853-1933) were able to reproduce syphilis, experimentally, in anthropoid apes. *Treponema pallidum* was discovered by scientists Fritz Richard Schaudinn (1871-1906) and Erich Hoffmann (1868-1959), in 1905. In the following year, German bacteriologist August von Wassermann (1868-1959), in collaboration with Albert Neisser (1855-1916) and Carl Bruck (1879-1944), developed the first method of diagnosis for this infirmity. Mercury, associated or not with warm baths, was, together with iodine, one of the first treatments used against the disease. Later on, therapy underwent a great evolution with the discovery of arsenic compound 606 (salvarsan) by Paul Ehrlich (1854-1915) in 1911. In 1921, derivatives of bismuth were introduced by Constantin Levaditi (1874-1953) and R. Sazerac. The treatment with antibiotics began in 1943. With the diffusion of penicillin, the incidence of syphilis was drastically reduced, to the point of being considered, nowadays, an easily controlled disease. In spite of this, in the last decades, a surprising increase of the infirmity was verified, a phenomenon perhaps caused by the inadequate use of medicaments and by the appearance of microorganisms resistant to penicillin. Another aspect to be considered is the presence of syphilis in patients bearing Acquired Immune-Deficiency Syndrome (AIDS), cases in which clinical conditions evolve more rapidly and in which treatment is less efficacious. Syphilis is also known as lues, venereal lues and avariosis. (See Hard chancre).


Symptomatic asthma: the same as reflex asthma or pseudoasthma, occurring as a reflex during diseases of viscera, nose or other parts of the body. It may designate any variety of asthma distinct from bronchial or true asthma, as diabetic, arthritic, herpetic, toxic or uremic asthmas. (See Asthma).

Sources: Cardenal, 1960; Stedman, 1979.
Tannic acid \([C_{76}H_{52}O_{46}]\): acid found in certain plants, especially in the bark of oak and other trees of the family Fagaceae. Often used as mordent in photography colorants and in the production of paper, inks and drinks. In medicine, it is employed as astringent in the treatment of diarrheas and burnings. By the end of the 19th century, tannic acid had ample acceptance as tonic and astringent, externally or internally taken. In the latter case, it is used against chronic inflammation of the buccal or pharyngeal mucous membranes and in the treatment of diphtheric angina, erysipela, chronic herpetic eruptions and pityriasis. Associated to benzoin it aborted smallpox pustules and attenuated deformed scars provoked by that disease.

Sources: Houaiss, 2001; Paulier, 1882; Stedman, 1979.

Torula: ancient designation of the fungi belonging to the genus Cryptococcus, family Cryptococcaceae, among which it is included Cryptococcus neoformans, the causative agent of cryptococcosis in humans and animals. Cryptococcosis, which used to be called torulosis, is an infectious disease characterized by nodular lesions or abscesses, mostly in the brains and meninges, but also in joints, lungs and subcutaneous tissues. Miquel & Cambier (1902) defined torula as any imperfect fungus forming acids, as for instance citric and lactic acids. (See Cryptococcosis; Cryptococcus neoformans).

Sources: Houaiss, 2001; Miquel & Cambier, 1902; Stedman, 1979.

Trichosporosis or trichosporiasis: an infection provoked by fungi of the genus Trichosporon, characterized by the presence of nodosities in hairs, also known as piedra negra and piedra alba or blanca. The former, caused by the fungus Piedraria hortai, attacks hairs principally; the latter, much rarer, is caused by Trichosporon beigelii, attacking the beard and mustache of young men. Both are related with precarious conditions of hygiene, but piedra negra occurs in regions of tropical climate and high pluviometric...
indices, whereas *piedra blanca* depends upon predisposing factors such as diabetes, AIDS (Acquired Immune Deficiency Syndrome) and other immune deficiencies.

Sources: Cardenal, 1960; Littré & Gilbert, 1908; Stedman, 1979; www.126

**Tubercle:** in anatomy, tubercles are small structures forming a rounded bulge on the surface of an organ, especially bones and certain regions of the brain. Examples are the quadrigeminos, mammillary tubercles (in the brain), Aranzi’s tubercle on the median part of the sigmoid valves of the aorta etc. Pathologically, for D’Elia (1926), tubercle was a common name given to two morbid alterations, one of the skin (cutaneous tubercle), the other common to all tissues (tubercle proper). A tubercle is also defined as a small rounded tumor, characteristic of tuberculosis, formed in the interior of tissues.


**Tuberculosis:** also known as white plague, it is the disease that has the greatest number of deaths in the history of humanity, still representing a great menace; contemporary studies have shown that almost 2 billion inhabitants of the planet are infected, and that about 3 million people are killed by tuberculosis every year. It is an endemic, infecto-contagious disease provoked by *Mycobacterium tuberculosis*, or Koch’s bacillus, a microorganism in the shape of a rod, discovered in 1882 by German doctor Robert Koch. This bacillus, devoid of movement of its own, needs oxygen to live and does not reproduce outside the body of man or other animal, except in laboratory cultures. Persons infected by the bacillus may not develop the disease. In most cases the invading bacteria are killed or rendered inactive by the natural defenses of the body. As a rule, the individual contracts the infection by inhaling bacilli floating in small drops of humidity in the air, bacilli let loose there by a patient of tuberculosis when he coughed or sneezed. The bacteria may also enter the body through contaminated food, as the milk of cows affected with tuberculosis. In countries where milk is pasteurized and animals periodically examined, the occurrence of this type of infection has become rare. The lungs constitute the main focus of the bacillus, but tuberculosis may affect almost all parts of the body: the lymphatic ganglia located at the thoracocervical region, pleurae, meninges, bones and joints, skin, kidneys, genital organs, eyes and intestines. All of these parts may harbor lesions caused by Koch’s bacillus. One of the forms of the disease, “cutaneous tuberculosis” or “tuberculosis vorax” (as it rapidly consumes the skin and the cartilages), is also known as “vulgar lupus” – a nosological category created by Robert Willan (1757-1812) in the beginning of the 19th century, but nowadays recognized as a modality of tuberculosis. The disease also attacks animals, especially domestic ones, as oxen, pigs and hens. In most cases, it develops when the natural defenses of the body are enfeebled by an infirmity or some other cause. Entering in contact with the organism, the invading germs activate the natural defenses, and many of them are killed. Moreover, defense cells surround groups of bacteria, forming hard tubercles within which the bacteria are kept alive, albeit inactive and innocuous (whence the term tuberculosis). Sometimes the disease manifests itself years after infection. The first invasion of germs, followed by the formation of tubercles, is called primary...
infection of primary complex, symptoms being rare during this period. Some other times, however, there are fever, nausea and eruptions on the skin. The first symptom of pulmonary tuberculosis is prolonged coughing, leading patients to believe they have only contracted a relented cold. Next, there is considerable loss of weight. In severe and advanced cases, there may be hemorrhage, the patient eliminating blood by the mouth. The fight between bacilli and body defenses may last for a long time. If untreated, the patient becomes more and more infirm. New cavities are opened in the lungs and the germs spread to other parts of the body. In 1890 Robert Koch (1843-1910) announced the discovery of a sterile glycerinated extract obtained from tuberculosis bacilli cultures, giving to that substance the name tuberculin. He verified that the product was extremely toxic to animals with tuberculosis and relatively innocuous to healthy ones. At first Koch believed he had found the cure for tuberculosis, but further experiments he carried out soon demonstrated the inefficacy of the treatment. Abandoned as a therapeutic method, tuberculin passed to be utilized in the diagnostic of the disease. As therapy for tuberculosis, initially prevailed the treatment made in sanatoriums, establishments created in Europe, America and other parts of the world starting in the second half of the 19th century. The objective of the treatment was the spontaneous cure of the patient submitted to adequate conditions: rest, overfeeding, favorable climate and the isolation. In 1909, two researchers of Pasteur Institute, Albert Calmette (1863-1933) and Camille Guerin (1872-1961) reported the development of a bacillus with attenuated virulence possessing immunizing capacity against tuberculosis. After a series of tests, BCG, the first attenuated bacterial immunizer, came to be regularly used as vaccine. The scientific progress verified during the first decades of the 20th century helped to refute some beliefs accepted until then about the disease, among them, its supposed hereditary character and the importance of the climate for the patient’s recovery. In 1944, the discovery of an antibiotics, streptomycin, by Selman Waksman (1888-1973) and collaborators, opened a new perspective for the treatment of tuberculosis. Other significant advance was the discovery of isoniazid (hydrazid of isonicotinic acid) in 1951, a substance that prevents proliferation of the bacilli. Once the efficacy of antibiotics for the cure of tuberculosis was corroborated, its treatment came to be made in ambulatories, in most cases, being unnecessary the internment of the patient. As a result, sanatoriums were gradually inactivated. In the past, in sanatoriums, a surgery was made to make a sick lung retract, so it stopped functioning. Doctors still opt for surgery in certain cases, but, instead of provoking the lung’s collapse, they only extirpate the affected part. The remainder of the lung keeps functioning normally. The consolidation of chemotherapy by means of antibiotics, together with the adoption of prophylactic measures and the simplification of the diagnostic, promoted a radical transformation in the epidemiological profile of the disease in the 1950’s and 1960’s, materialized into an accentuated decline of mortality indexes. Notwithstanding, the continual use of antibiotics, as well as the prescription of inadequate therapies, occasioned the appearance of drug resistant bacilli. The problem was partly supplanted by the development of new chemotherapic agents and by advances
obtained in the field of microbiology. As the resistance to bacillus is in part determined by the immune system, in the last decades the association of tuberculosis with Aids became frequent. In the last years a growing number of resistant bacilli has been verified. In addition to isoniazida and streptomycin, the drugs more used in the treatment of tuberculosis are etambutol, pararninosalicilic acid – PAS and rifampina. In spite of the considerable reduction of cases of tuberculosis in many nations, including in Brazil, the disease still is a severe public health problem in developing countries, principally in Africa, where there is scarcity of medicaments. Tuberculosis is a very old disease, having been found in lesions of probably tuberculous etiology in bones of Egyptian mummies dating from 3700 b.C. Before affecting man, it was an endemic disease of animals from the Paleolithic Period. It is believed that the agent of tuberculosis had bovine cattle as its original host, Mycobacterium tuberculosis being a mutation of Mycobacterium bovis, favored by the contact of man with cattle and the increase of demographic density of human populations. The infirmity spread to such a point through western Europe that it came to be the cause of 25% of deaths. It was infrequent or unknown in America, having been imported by European immigrants. However, there are studies indicating that it could have been the cause of some deaths in pre-Columbian Peru. Up to the beginning of the 20th century it was practically unknown in sub-Saharan Africa and in the middle of that century it had not yet reached New Guinea, Papua and Indonesia. (See Koch’s Lymph).


**Tuberculosis cutis verrucosa:** a lesion of the skin caused by Koch’s bacillus presenting a verrucose surface with a chronic inflammatory base with suppuration. Also known as tuberculosis verrucosa of the skin, verrucose or papulous lupus, tuberculous wart and scофulodermia verrucosa.

Sources: Cardenal, 1960; Stedman, 1979.

**Tuberculosis miliaris acuta or acute granulous tuberculosis:** one of the two main forms of human tuberculosis, characterized by the generalized dissemination of Mycobacterium tuberculosis in the organism and the formation of minute and countless tubercles in various organs and tissues. It differs from the localized form, which is limited to a specific organ or tissue (lung, bone, kidney, etc.). (See Tuberculosis).

Sources: D’Elia, 1926; Ferreira, 1999; Larousse, 1971; Stedman, 1979.

**Tuberculous or tuberose Lupus:** chronic cutaneous infirmity characterized by the development of nodular lesions on the face, generally around nose and ears. The term was originally used to designate any type of corrosive ulceration of the skin. In 1808, Robert Willan (1757-1812) differentiated lupus from other cutaneous infirmitities, classifying it as a chronic disease with the name of vulgar lupus. It was also called cutaneous tuberculosis. In 1851, Pierre Louis Alphée Cazenave (1795-1877) described erithematous lupus, distinguishing it from the form identified by Willan. Nowadays the word lupus is always accompanied by an adjective specifying its type. (See Erythematous lupus).

Tularaemia: acute infecto-contagious disease of moderate gravity, provoked by inoculation or ingestion of a Gram-negative bacterium – *Francisella tularensis* (previously known as *Bacterium tularense, Pasteurella tularensis*). It is transmitted to man through contact with infected animals or through ingestion of contaminated meat. It may also be conveyed through the bites of infected arthropods such as ticks, lice, horseflies and mosquitoes. It shows a ulcero-ganglionary form generally localized in the region of the bite, and a pleuro-pulmonary form. Its characteristic symptoms are fever, headache, vomit and adenopathy. In 1910, George Walter McCoy (1876-1952) discovered the disease in wild animals in Tulare County, California. Two years later, the same McCoy, together with Charles W. Chapin, described the etiological agent, calling it *Bacterium tularense*. In 1914 the first human manifestation of the infirmity was recognized by William Buchanan Wherry (1874-1936) and B. H. Lamb. As an homage to North American doctor Edward Francis (1872-1957), responsible for important studies about this disease, agent was renamed *Francisella tularensis*.

Uffelmann, Julius August Christian: German doctor born in Hannover, in 1837, died in 1894. After studying theology and philology in Göttingen, he studied medical sciences. He was a physician in Hameln, Privat-Dozent in Rostock, where he taught from 1876 on, and ausserordentlicher Professor (extraordinary professor) three years later. He published papers about several themes and, in his Manual of domestic hygiene of the child (1891), defended the importance of diet and hygiene for the control of diseases.

Sources: www.181; www.167; www.166.

Ulcer: an open lesion with loss of substance in a cutaneous or mucous tissue, causing disintegration and necrosis. Ulcers are more likely to show in parts of the body with bad blood circulation. Even a small blow on those parts may lead to an ulceration. A wound due to traumatism may become ulcerated if an infection occurs.


Unna, Paul Gerson: German dermatologist born in Hamburg on September 8, 1850. He studied medicine first at Heidelberg University, which he entered in 1850, then at Leipzig and at Strasburg University, where he graduated, under the orientation of Waldeyer, in 1875. His doctoral thesis - Über die Entwicklung der Haut (On the development of skin) - brought to light entirely new knowledge about the different parts and constituting elements of skin. In order to make his observations, Unna employed osmic acid and a new dye, picro-carmine, recently discovered by Ranvier. The results of his work would be partially published in his Handbuch der speziellen Pathologie und Therapie, in 1883. Once graduated, Unna went to Vienna, where he studied under Ferdinand von Hebra’s (1816-1880), Moriz Kaposi’s (1837-1902) and Heinrich Auspitz’s (1835-1886) orientation. In 1877, together with Auspitz, he published two articles on pathological anatomy of syphilitic...
chancre, in *Vierteljahresschrift für Dermatologie und Syphilis*. Going back to Hamburg in 1876, he was hired as assistant doctor in the syphilis section of St. George Hospital, in Engel Reimers, an activity that he tried to conciliate with his practice at his father’s clinic in Hamburg. In the beginning of the 1880’s, he founded his own clinic, dedicated to skin diseases. With Oskar Lassar and Hans Hebra, he created, in 1882, the *Monatshefte für praktische Dermatologie* (now *Dermatologische Wochenschrift*), the first dermatological journal in Germany and one of the main references of that specialty in the world. The clinic was soon rendered insufficient to attend the growing demand. Unna decided therefore to abandon general clinics and dedicate himself solely to dermatology. In 1884, in a suburb of Hamburg, he inaugurated a modern institute of dermatological training, which came to be attended by students from all over the world. The *Dermatologikum* also attracted doctors of several nationalities, many of them considered pioneers in their respective countries. One of them was Adolpho Lutz, who arrived in Hamburg in March, 1885. Under the orientation of Unna, the Swiss-Brazilian physician developed an important work on the bacteriology of leprosy and other dermatological diseases. In his article published in 1886, in *Monatshefte für praktische Dermatologie* (*Zur Morphologie des Mikroorganismen der Lepra*), Lutz proposed a new classification for the microorganism discovered by Gehard Amauer Hansen (1841-1912). Considering it a new genus, he called it *Coccothrix*. Unna worked for 25 years on the histology of leprosy, having made important contributions to bacteriology, pathology and the therapy of the disease, creating his own histological methods and staining techniques for cells and tissues. In 1891 he discovered plasmatic cells and, in the course of time, verified that they were fundamental components of chronic infections and infectious neoplasias. He also established the difference among several types of adipose tissues and undertook historical studies about the concept of eczema. In 1894 he published his monumental *Die Histopathologie der Hautkrankheiten* (Histopathology of skin diseases), a work that consolidated his prestige as one of the most important dermatologists in the world. From 1906 on, he directed his laboratory researches to the field of chemistry. With Golodetz, he clarified the until then imprecise chemistry of corneous substances, a great advance in dermatology. Researching the biochemical processes of skin, he discovered *stratum granulosum*. In 1911, he verified on the skin the presence of areas with an excess of oxygen (*Sauerstofforte*) and of areas which consumed much oxygen (*Reduktionsorte*). Two years later, using the method of *Chromolyse*, he tried to establish a bridge between histology and the chemistry of tissues. Based on a systematic series of alternating tests with chemical solvents and dyes in sections of congealed tissue, the new method aimed at determining whether the element of the tissue to be examined was or not dissolved after been stained. In 1928 he published *Histochemie der Haut* (Histochemistry of the skin), compiling his main conclusions about tissue chemistry. Besides his works on dermopathology, he left notable contributions in the field of clinical dermatology. He was the author of fundamental studies about impetigo, lichens, diseases of nails and erythema, among other illnesses. In addition, he described a chronic affection of the skin characterized by the inflammation of
regions rich in sebaceous glands, especially the scalp and areas on the face and trunk. Of unknown origin, it was called Unna’s disease. His contributions to therapy have been of great importance. Unna thoroughly studied the effect of reduction agents on skin, among them chrysarobin, pyrogallol, resorcin and ichthyol. He introduced the use of medical soaps and recommended skin cauterization for the treatment of small benign tumors and pustular lesions. He developed a paste composed of zinc oxide, gum mucilage and glycerin, which became known as Unna’s ointment, still used today in the treatment of varicose ulcers and pururiginous dermatoses. Even before the introduction of radioactive treatments, he worked in the eradication of lupus, which he considered curable. In the field of cosmetics, he defended the use of colored ointments, pastes and powders for face and hands. He published over 150 articles and several monographs. Kriegsaphorisms eines Dermatologen (War aphorisms of a dermatologist) was created during World War I, with the intention of training doctors of the German armed forces in the treatment of common dermatoses. Unna also wrote Die allgemeine Therapie der Haut-Krankheiten (General therapy of skin diseases) and Diagnose und Behandlung von Hautkrankheiten durch den praktischen Arzt (Diagnosis and treatment of skin disease by physicians). Unna, who had always despised academic positions and had many warm disputes with many of those who had them, became, in 1907, full professor of Eppendorf Krankenhaus. The following year, he assumed the position of head-doctor of that institution and, in 1919, was named professor of dermatology of the University of Hamburg. Besides the above mentioned work, he authored the chapter on dermatology of von Orth’s (1847-1923) Lehrbuch der pathologischen Anatomie, and was co-editor of the Internationaler Atlas seltener Hautkrankheiten (Hamburg and Leipzig, 1889-1899). He died in Hamburg, victimized by flu, on January 29, 1929.

(See Chrysarobin; Leprosy; Lichen; Pyrogallic acid; Staining; Unna’s ointment).


Unna’s ointment: a paste of zinc oxide, gum mucilage and glycerin, created by German dermatologist Paul Gerson Unna (1850-1929). It was used in the treatment of varicose ulcers. Legs were wrapped up with bindings impregnated with the ointment, a curative procedure that became known as “Unna’s boot”. It is still employed nowadays in the control of hypertension of lower limbs, to help the cicatrization of venous ulcers. Some sources define Unna’s boot as a bandage impregnated with paste of zinc oxide at 10%, glycerin, petrolatum, antiseptic agents and cicatrisants.

(See Unna, Paul Gerson).

Van Gieson’s staining: a method of staining histological preparations with the oldest dye in usage, van Gieson’s, constituted by 0.05 part of acid fuchsine and 100 parts of a solution of saturated picric acid. In the presence of picric acid, the acid fuchsine stains the collagenous tissue in a very elective, intense red. The method has the shortcoming of giving a too pale coloration to cytoplasms susceptible to picric acid. (See Fuchsin; Picric acid).
Sources: Cardenal, 1947; Fernandes, 1943.

Vesicular pityriasis: also known as pityriasis versicolor; tinea versicolor; pano and pano branco (in Brazil); tinea furfuracea, chromophytosis and Eichstedt’s disease, after the German doctor Karl Ferdinand Eichstedt (1816-1882). It is a common, superficial, fungal infection caused by the saprophytic fungus *Pityrosporon orbiculare*, also called *Microsporon furfur* or *Malassezia furfur*, which normally lives on the skin of genetically predisposed, generally young, individuals. The disease is identified by scaly, oval lesions of a red to brown or white color, located on the neck, trunk, arms and cervical region. It may ascend to the face or spread through the forearms, abdomen, flanks, buttocks and thighs, merging into larger lesions with irregular borders, sometimes quite extended. As the name “versicolor” itself suggests, lesions change color. During summer months, when the skin becomes exposed to ultraviolet light, lesions become hyperpigmented, as the infection prevents the fabrication of pigment by the affected skin. Examination of the lesion with KOH reveals yeast-like forms budding and claviform hyphae. According to D’Elia (1926), treatment consisted of sulphurous baths, rubbing with black soap, application of lotion with chloral, van Swieten’s liquid and iodine tinctures. Nowadays treatment is made with creams, unguents or lotions of econazol, myconazol, clotrimazol and cyclopyrox, applied twice or thrice a day for three to four weeks.
Another alternative consists in daily soaping, for three to four weeks, with sodium hyposulfate at 10-20%, which is left to dry over the skin, or of selenium sulfate at 2.5% (the base of a commercial shampoo), daily, either twice or thrice a week, letting it act for 15 to 20 minutes. Alcohol salicylate (4%) with benzoic acid (4%) is also useful. Tolnaftate as lotion or cream is an active topical drug. Hypochromy tends to disappear more rapidly when exposed to solar light after treatment, and repigmentation may be accelerated by means of local photosensibilizers (Veronesi, 1982).


Vesuvine: term originated from “Vesuvius”, Italian volcano. A brown-colored dye used in microscopy, constituted from the action of nitrous acid upon metaphenylenediamine. Very much used in histological techniques in aqueous solution at 1 to 100. Also known as Bismarck’s brown or triamidobenzene.

Sources: Cardenal, 1960; Larousse, 1971.

Vitiligo: a dischromatic lesion of the skin, of unknown cause, characterized by the localized loss of pigmentation and the presence of white spots of various sizes and generally with asymmetric distribution. The skin surrounding the lesioned areas is normally hyperpigmented, and the hairs on the affected parts are almost always white. Also known as acquired leucodermy or acquired leucopathy.

Sources: D’Elia, 1926; Ferreira, 1999; Houaiss, 2001; Landouzy & Jayle, 1902; Littré & Gilbert, 1908; Stedman, 1979.
Weigert, Karl: German pathologist (1845-1904), who, from 1871 on, developed ingenious staining methods for different species of bacteria, enormously contributing to the microscopic investigation of these beings. He also created methods for the observation of myelin, of elastic fibers, of fibrin and other organic structures. Weigert verified that a solution of fuchsin, resorcin and iron chloride rendered elastic fibers bluish. Fibrin is dyed in a solution of violet crystal-aniline, then treated with a solution of iodine-potassium iodide and then discolored in oily aniline and xylol; the fibrin thus acquires a dark-blue coloration. Equal results are obtained for myelin, when it is dyed with iron chloride and hematoxylin, the degenerated portions acquiring a yellowish taint. A more complex method renders the neuroglia and the nuclei of its cells bluish, using cupric hematoxylin for the nervous tissues. In relation to Actinomycetes, Weigert recommended soaking them for an hour in a dark-red solution of orseillin in twenty parts of alcohol, five parts of acetic acid and forty parts of distilled water; next, the compound should be washed and stained with an 1% aqueous solution of violet crystal, and finally decolorized with 60% alcohol. Iron hematoxylin, a solution containing hematoxylin, iron chloride and hydrochloric acid, is used as a dye for nuclei of cells. Other techniques created by the German pathologist are still in use, or were perfected; his name is also given to a law according to which the loss or destruction of a part or an element of the organic world may result into a compensating overproduction, especially in processes of regeneration or repairing of tissues and bones. (See Fuchsin; Staining).

Sources: Cardenal, 1960; Fernandes, 1943; Stedman, 1979; www.46.

Wernicke, Roberto Johann: Argentinian parasitologist, son of German immigrants, Wernicke was born in 1854 and died in 1922. He obtained his MD at Jena University, Germany, taught pathology at the Faculty of Medicine in
Buenos Aires. Together with his disciple Alejandro Posadas (1870-1902), he was the first to describe a new skin disease initially called fungoid mycosis with psorospermians, and, later on, as Posadas-Wernicke’s disease or coccidioidomycosis. Both authors published their discoveries independently, in 1892. Wernicke in “Über einen Protozoenbefund bei Mycosis fungoides”, in the Centralblatt für Baktyeriologie und Parasitenkunde (1892; 12: 859-61), and Posadas in “Un nuevo caso de micosis fungoidea con psorospermia”, in the journal Círculo Médico Argentino (1892; 15: 585-97). In 1893, a new case of the disease was observed by Canadian surgeon Emmet Rixford (1865-1938). New cases were registered in California in 1894 and 1896. The causative organism of that disease was called Coccidioides immitis and definitely characterized by William Ophüls and H. C. Moffit (1871-1933) in “A new pathogenic mould formerly described as a protozoan: Coccidioides immitis pyogenes: Preliminary report”, published in the Philadelphia Medical Journal, 1900, v.5, p.1471-2. Also with Posadas, Wernicke was the first to report a case of rhinosporidiosis. (See Coccidioidomycosis; Coccidium; Posadas, Alejandro; Psorospermosis). Sources: www.19; www.29; www.225.

Wucherer, Otto Eduard Heinrich: the son of a Dutch mother and of a German merchant, he was born on July 7, 1820, in the city of Oporto, Portugal, and died in Salvador, Bahia, Brazil, on May 7, 1873. As his father became established as a merchant in Salvador, he lived between his sixth and seventh years in that Brazilian city, moving afterwards to the German district of Baden-Württemberg. He graduated in medicine at the University of Tübingen. Returning to Bahia in 1843, he practiced medicine in several towns of that province before establishing himself in Salvador, in 1847. Attuned with the discussions and theoretical problems of medical topography and geography, he dedicated himself, together with other physicians of that province – especially John Ligertwood Paterson (1820-1882) and José Francisco da Silva Lima (1826-1910) – to the study of tuberculosis, leprosy and ophidism, in addition to diseases associated to tropical climates, notably opilation (ancylostomiasis), beriberi, schistosomiasis, filariasis and the ainhum. Published in the Gazeta Médica da Bahia, a journal that circulated from 1866 to 1915, Wucherer’s studies, and those of other members of his group, ended up by rendering them famous, originating what was afterwards called the Tropicalist School of Bahia. Sources: Barreto & Aras, 2003; Edler, 2002; Larousse, 1971; www.155.
**Yaws**: also known as bubas, pian, rupia, Amboine button, frambesia, frambesia-like mycosis, polypapillome, tropical granulome, zymotic papillome or yet Breda’s disease. A contagious tropical disease caused by spirochete *Treponema pertenue*, it is characterized by cutaneous lesions followed by generalized granulomatose eruption and sometimes by belated destructive lesions of the skin and bones. The disease may destroy the nose cartilage, bones and joints, to the point of invalidating a patient. Yaws may be cured with penicillin injections. The generalized use of this drug, since the 1950’s, considerably decreased the number of cases all over the world. The spirochetes of yaws, very similar to those causing syphilis, penetrate the body through cuts or scratches in the skin, the disease being contracted, in many cases, through contact with an already infected person. From the morphological point of view, it is practically impossible to differentiate *Treponema pertenue* from the syphilis treponeme. However, contrariwise to the latter, that of yaws does not affect the central nervous or the cardiovascular systems. Endemic in the beginning of the 20th century, the disease assailed especially the tropical regions of Africa and the Americas, Polynesia, Ceylon (Sri Lanka), Malaysia and other parts of eastern tropics. In the regions where it occurred in endemic form, it frequently became epidemic. (See *Spirochaeta pertenuis*).

Sources: Cardenal, 1947; D’Elia, 1926; Houaiss, 2001; Koogan-Houaiss, 2004; Murray, 1910; Stedman, 1979; Veronesi, 1982.

**Yeast**: unicellular Ascomycetes fungi that produce alcoholic fermentation of sugared solutions or used to leaven bread. The most important genus is *Saccharomyces*.

(See Fungi).

Zambaco, Démétrius Alexandre: descendant of Greeks, he is also known as Dimitrios Zambakós pasás or Zambaco Pasha, reference made to the title received from the Ottoman Khedive of Egypt for medical services rendered to that country. Born in Constantinople, in Turkey, on May 6, 1831, he obtained French citizenship after his transference to Paris to study at the Faculty of Medicine of Paris. Head of clinic of that faculty and national correspondent by the Division of Anatomy and Physiology of the Academy of Medicine, he authored several important papers on leprosy, all published in Paris: Mémoire sur la lèpre observée à Constantinople (1887), Voyages chez les lépreux (1891), Les Lépreux ambulants de Constantinople (1897), La lèpre à travers les siècles et les contrées (1914). According to William Tebb, during the First International Congress of Dermatology and Syphilography, held in the French capital in August, 1889, Zambaco communicated the results of his researches on leprosy carried out on the isle of Metilene, in Turkey, defending the theory that the disease was not transferred from person to person. The inexistence of cases among the fifteen thousand Muslims inhabiting the island seemed to corroborate his ideas of the non-contagiousness of the disease. In the history of medicine his name is also associated to the propositions, defended by the end of the 19th century, of cauterization and removal of the clitoris to diminish the supposed feminine propensity to masturbation. Among his papers about human sexuality, may be cited Onanisme avec troubles nerveux chez deux petites filles (1882) and Les Eunuques d’aujourd’hui et ceux de jadis (Paris, 1911). He was a member of the Academies of Medicine of St. Petersburg and Vienna and president of the Constantinople Society of Medicine. He died in Cairo on November 17, 1913. (See Leprosy).


Ziemssen, Hugo Wilhelm von: German doctor born in Greifswald on December 13, 1829, Ziemssen died in Munich, on
January 21, 1902. He taught medical clinic at Erlangen University in 1862, and at Munich University the following year. He took his MD only in 1880, already as pathologist and director of the Municipal Clinic of Munich, with a thesis entitled *On myelin, pigment and micrococci of the sputum*. He is recognized for introducing examination methods and treatments with electricity in German medicine, and for his studies on heart movements.


**Zooglaea**: ancient name given to a mass of bacteria kept aggregated due to the production of a gelatinous substance. (See Bacteria).

Sources: Ferreira, 1999; Houaiss, 2001; Littré & Gilbert, 1908; Stedman, 1979.