SYPHILIS, HISTORY, SCIENCE, AND ARTS: SYPHILIS HISTORY CALENDAR

SÍFILIS, HISTÓRIA, CIÊNCIA E ARTES: CALENDÁRIO DA HISTÓRIA DA SÍFILIS

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ABSTRACT

Introduction: Syphilis is a very old disease involved by many mysteries. From its origins to the reason why even having simple and effective diagnosis and treatment for more than half a century, it remains, in 2021, as a public health problem practically all over the world. Be it in high-developing countries as well as in developing ones. Methods: We used the prior personal knowledge of health professionals and researchers, who have worked in the field of sexually transmitted diseases for decades, combined with the search on the Internet, often on Wikipedia and Google, about events and characters involving subjects and publications about syphilis. Results: After several analyses and researches, we listed 68 facts and characters from around the world, including several Brazilians. Conclusion: At a time (2020 and 2021) where the subject, worldwide, on a daily basis, is SARS-CoV-2/COVID-19, this unprecedented publication on facts and characters involving syphilis can be a milestone so that, in addition to technical and scientific knowledge, the academic community realizes the anthropological, sociological, and cultural wealth that involves an entity that is much more than an infectious disease, such as syphilis.

Keywords: syphilis; history; life change events.

INTRODUCTION

Few diseases have a history similar to that of syphilis. Few diseases have the mysteries of syphilis.

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The word syphilis appears for the first time in a poem by the doctor and writer Girolamo Fracastoro, “Syphilis Sive Morbus Gallicus” (Syphilis or French Disease), published in Verona, Italy, in 1530(1).

The mystics about the origin of the disease emerge along with its name: was it a French disease? But the French said it was a Spanish disease. These, in turn, said it was an English one. And so, each person posed the problem to the neighboring people. Until, they decided to “blame” on the sailors of Christopher Columbus, as the carriers of the disease of America, with their return to Europe after the discovery in 1492(2).
More recently, they discovered, in Europe, bones from Medieval times with lesions typical of alterations caused by syphilis. Carbon dating demonstrated that the skeletons were dated 100 years before 1492, discovery of the Americas. But there is controversy\(^6\),\(^4\).

Syphilis, which has been serologically diagnosed with great sensitivity and specificity for many decades and has a highly effective treatment with penicillin (without any documentation of bacterial resistance) since the 1940s, even today, in 2021, is presented as a highly prevalent disease around the world and as a serious public health problem in dozens and dozens of countries. Even in countries with high human development, such as the United States, congenital syphilis (intrauterine transmission from mother to child) is of high concern and is in increasing incidence\(^7\).

As for treatment, syphilis has undergone several experiments, from heating patients in steam chambers to clean and eliminate fever caused by malaria, *Plasmodium vivax*, into the vein of patients with syphilis. It was believed that fever caused by malaria would kill the syphilis bacteria that inhabited the patient’s body at a late stage\(^8\).

Two American presidents, Bill Clinton and Barack Obama, have already apologized in public ceremonies for racist and unethical research conducted by American “researchers” and conducted with support from the country’s public health service\(^7\),\(^8\).

Medical societies, syphilography specialty, artwork, films, documentaries, hundreds of technical books, books on history and even novels have already documented the disease. In Brazil, Law No. 13.430/2.017 determines the third Saturday in October as the National Day to Combat Syphilis and Congenital Syphilis. We seek that this activity is recognized by the World Health Organization for worldwide coverage\(^9\).

**The Brazilian cultural project**

Then, working for the elaboration of an exhibition in Paço Imperial, Praça XV de Novembro, Rio de Janeiro, about “Syphilis, history, science, and arts”, we had the desire and the need to recount facts and characters that involve one of the biggest mimics among diseases: syphilis.

We hope that this material will serve as support to increase knowledge about the disease, aiming that, in the shortest possible time (that is, not a century), syphilis, especially congenital syphilis, will no longer be a serious public health problem.

We hope that this document will serve as an introduction so that people around the world, who have interesting historical data on syphilis, can contact us to improve and expand this work.

We hope that it will serve as an inspiration for similar publications to be organized for other equally striking diseases, such as tuberculosis, leprosy, AIDS...

We hope that this document will serve as a call for more scholars to move forward to unravel the mysteries of syphilis, a disease that has plagued humanity for centuries, perhaps millennia, with millions upon millions of deaths and that, until now, 2021, does not even have an outline of an effective vaccine, even with a protection rate below 50%.

Soren Kierkegaard (1813–1855), poet, theologian, and first existentialist philosopher, said that “life is lived forward, but the understanding we have of it comes from examining the past”. It is a pity that understanding history rarely makes us immune to making the same mistakes\(^10\). But, thinking like the positivists, we must insist on the sharing of culture.

Thus, we present the work as a sequence of calendar.

**OBJECTIVE**

To list and describe, with date, day, month, and year, in a calendar model, events and characters that involve studies and quotes about syphilis.

**METHODS**

We used the prior personal knowledge of health professionals and researchers, with expertise in the field of infectious diseases, especially on venereal diseases/sexually transmitted diseases/sexually transmitted infections for decades, coupled with the search on the internet, often on Wikipedia (Portuguese, English, German) and Google, for events and characters involving subjects and publications about syphilis.

**RESULTS**

After several analyses and surveys, we listed 68 facts and characters from around the world, several of whom were Brazilian (Table 1).

**STRENGTHS**

As a positive point of our effort, we mention that it is the first time that such a work has been published in a scientific journal, gathering a considerable number of data, from different spectra, about the same nosological entity. It will serve as a backbone for a 2021 calendar, “Syphilis, the great imitator”, in printed and digital formats, in several languages, and for a cultural exhibition, “Syphilis, history, science, and arts”, to be held in 2021, in the city of Rio de Janeiro.

**LIMITATIONS**

We believe that other events and characters will still need to be discovered and related. We even name one: founding date of the institution Venereal Disease Research Laboratory, University of North Carolina (UNC), School of Public Health, in Chapel Hill, North Carolina, USA. Despite attempts at contacts, e-mails and telephone calls, with professors from the sector that succeeded the VDRL, Treponemal Pathogen and Immunology Branch and messages for Contact from CDC-USA, we were not successful until the completion of this manuscript.

**CONCLUSION**

At a time (2020 and 2021) where the subject, worldwide, whether in scientific publications or the lay press, in writing, on television or on the internet, on a daily basis, is SARS-CoV-2/COVID-19, this unprecedented publication on facts and characters that involve syphilis can be a milestone so that, in addition to technical and scientific knowledge, the academic community realizes the anthropological, sociological, cultural richness that involves an entity that is much more than an infectious disease, such as syphilis.
Table 1 – Calendar of facts and characters worldwide involving studies on syphilis.

| January |
|---------|
| 1       |
| National STD and AIDS Program of the Ministry of Health of Brazil

Creation of the National STD and AIDS Program of the Ministry of Health of Brazil, in 1986, by the then minister Roberto Santos. Available at: http://www.aids.gov.br/pt-br/centrais-de-conteudos/historia-aids-linhado-tempo

| 3       |
| Douglas Moray Cooper Lamb Argyll Robertson

Douglas Moray Cooper Lamb Argyll Robertson was born in 1837. He was a Scottish ophthalmologist and surgeon. He was also president of the Royal College of Surgeons of Edinburgh. He described a symptom of neurosyphilis that affects eye pupils, a condition later known as “Argyll Robertson pupil”. In 1869, he published an article describing the pupils’ unusual reactions to light and accommodation in patients with tabes dorsalis (syphilis that affects the spinal cord). In his study, he describes small pupils that did not contract in response to light stimulation, but contracted normally during accommodation and convergence. The “pupil of Argyll Robertson” has become an important signal for the diagnosis of syphilis affecting the central nervous system. Available at: https://en.wikipedia.org/wiki/Douglas_Argyll_Robertson

| 22      |
| Albert Ludwig Sigesmund Neisser

Albert Ludwig Sigesmund Neisser was born on January 22nd, 1855, Świdnica, Poland. He was a German doctor and scientist, known for having discovered the causative agent of the sexually transmitted disease gonorrhea, whose bacterium is known scientifically as Neisseria gonorrhoeae, in his honor. He studied at the University of Breslau and later at Erlangen. Together with August Paul von Wasserman, they created the serology for Lues (syphilis), with alcoholic extract of macerated ox heart plus lecithin and cholesterol. This extract had been used since 1922 and only in 1941 was the macerated ox heart antigen identified as cardiolipin. He was tireless in fighting STD (including syphilis) and in caring for prostitutes. Available at: https://en.wikipedia.org/wiki/Albert_Ludwig_Sigesmund_Neisser

| 31      |
| Giovanni da Vigo

Giovanni da Vigo (1450–1525, we have not found complete dates). In 1514, da Vigo published the “Practica in arte chirurgica copiosa”, a complete work on surgery, composed of nine books and written in Latin. The book on the diseases dealt with the French disease (usually equated with current syphilis). Vigo was one of the first to advocate the use of mercury ointment in the treatment of syphilis, although Leoniceno and Cumano considered it ineffective and Juan Almenar considered the ointment as a cause of epilepsy and paralysis. Vigo distinguished between the primary and secondary stages of the disease, anticipating the opinions of Antonio Musa Brassavola de Ferrara. Available at: https://es.wikipedia.org/wiki/Giovanni_da_Vigo https://www.encyclopedia.com/science/dictionaries-thesaurusespictures-and-press-releases/rego-giovanni-da
Table 1 – Continuation.

February

5
Brazilian Society of Dermato-Syphilography

Foundation of the Brazilian Society of Dermato-Syphilography, the first scientific society in the area of venereal diseases, in 1912, during the period in which Fernando Terra held the chair. The amphitheater of the 19th Infirmary (São Miguel Couto Pavilion) of Santa Casa de Misericórdia of Rio de Janeiro for many years hosted the entity's meetings. Available at: https://pt.wikipedia.org/wiki/Sociedade_Brasileira_de_Dermatologi

15
Adolf Jarisch

Adolf Jarisch was born on February 15th, 1850. He was an Austrian dermatologist specialized in the treatment of venereal diseases. The Jarisch-Herxheimer reaction, an inflammatory response that he noticed after treatment for syphilis, was partially named after him. Jarisch was the father of a famous pharmacologist, Adolf Jarisch Jr. Available at: https://en.wikipedia.org/wiki/Adolf_Jarisch

21
August Paul von Wasserman

August Paul von Wasserman was born on February 21st, 1866. Wasserman developed, in 1906, the first serological test for syphilis, with alcoholic extract of macerated ox heart plus lecithin and cholesterol, called cardiolipin. The test detected antitreponemic antibodies. It is still used today as VDRL (Venereal Disease Research Laboratory). Available at: https://en.wikipedia.org/wiki/August_von_Wassermann

22
Miss Evers' Boys

Worldwide release of the film about the Tuskegee experiment, a secret “medical study” of the United States federal government’s public health service with black and poor men in the years from 1932 to 1972, designed to study the effects of untreated syphilis. The story is told from the perspective of a small-town nurse, Eunice Evers (Alfre Woodard), who is well aware of the lack of treatment, but feels that her role is to console the men involved, many of whom are close friends with her. In Brazil, the film received the name “Cobaias”. The film collected awards. We highlight the 1997 Emmy Award for Best Leading Actress in a Miniseries or Film: Alfre Woodard. Available at: https://en.wikipedia.org/wiki/Miss_Evers%27_Boyshttps://www.passeidireto.com/arquivo/34850647/analise-critica-do-filme-cobaias

Continue...
Dr. Ehrlich’s Magic Bullet

Worldwide release of the film “Dr. Ehrlich’s Magic Bullet”, from 1940, of the biographical drama genre, directed by William Dieterle and starring Edward G. Robinson and Ruth Gordon. The script, by John Huston, is based on the letters and notes of Doctor Paul Ehrlich, discoverer of the cure for syphilis, and has the courage to address syphilis at a time when venereal diseases were a taboo topic in major Hollywood studios. Available at: https://en.wikipedia.org/wiki/Dr._Ehrlich%27s_Magic_Bullet

M. Léon Bassereau

M. Léon Bassereau was born in 1810 and died on March 2nd, 1888. The notorious French venereologist published books on skin and syphilis, in addition to proposing treatment for the disease with potassium iodide, winning a silver medal by the Medical Society of Paris, in 1845. Available at: https://europepmc.org/scanned?pageindex=1&articles=PMC2197464

Julius Wagner Jauregg

Julius Wagner-Jauregg was born on March 7th, 1857, in Wels, Austria. He was a psychiatrist. He created malariotherapy, a treatment that consisted of injecting Plasmodium vivax (one of the causes of malaria) directly into patients’ veins to produce fever, since treponemas are likely to die due to high fever. Thereafter, patients received quinine for treatment against malaria. He struggled for thirty years looking for a way to fight the insomnia caused by Schaudinn’s spirochete. Available at: https://de.wikipedia.org/wiki/Julius_Wagner-Jauregg

Jean Alfred Fournier

Jean Alfred Fournier was born on March 12th, 1832, in Paris. A French dermatologist specialized in the study of venereal diseases. He described the “Fournier’s sign”, thinning of the distal third of the eyebrows, as a typical clinical finding of syphilis in the final part of the recent stage of the disease (secondary syphilis). Available at: https://en.wikipedia.org/wiki/Jean_Alfred_Fournier

DST - J bras Doenças Sex Transm 2021;33:e213303:1-20
Table 1 – Continuation.

14
Paul Ehrlich

Paul Ehrlich, born on March 14th, 1854, Strzelin, Poland, developed the drugs Salvarsan and Neo Salvarsan, the first chemotherapy drugs against syphilis, also called “magic bullet” at the time. He received the 1908 Nobel Prize in Physiology or Medicine.
Available at: https://de.wikipedia.org/wiki/Paul_Ehrlich

18
Eduardo Palassin Guinle

Eduardo Palassin Guinle was born on March 18th, 1846. Together with Candido Gaffrée, he created the important and remarkable Gaffrée and Guinle Hospital, with the initial objective of becoming a center of attention to venereal diseases, mainly syphilis and gonorrhea, which plagued the city of Rio de Janeiro at the time. Today, the Gaffrée and Guinle University Hospital is a fundamental part of the Federal University of the State of Rio de Janeiro (Universidade Federal do Estado do Rio de Janeiro – UNIRIO).
Available at: https://pt.wikipedia.org/wiki/Eduardo_Palassin_Guinle

23
Sahachirō Hata

Sahachirō Hata was born on March 23rd, 1873. A prominent Japanese bacteriologist, he collaborated in the development of the drug Arsphenamine, in 1909, in Paul Ehrlich’s laboratory. He was nominated for the Nobel Prize in Chemistry in 1911 and for the Nobel Prize in Physiology or Medicine in 1912 and 1913. In Germany, Hata was invited to learn about chemotherapy at the German National Institute for Experimental Therapeutics in Frankfurt. In return, Hata was able to instruct his technique of infecting rabbits with Treponema pallidum and assist Paul Ehrlich in the discovery of arsphenamine, which has proved effective in curing syphilis. The medication was called Salvarsan 606 because it was the 606th drug that Ehrlich tried.
Available at: https://pt.wikipedia.org/wiki/Eduardo_Palassin_Guinle

28
Lair Guerra de Macedo Rodrigues

Lair Guerra de Macedo Rodrigues was born on March 28th, 1943 in Curimatá, in the state of Piauí. Lair, a social and biomedical assistant, was the first director of the National STD and AIDS Program when it was created, in 1986. She specialized in public health management and sexually transmitted diseases at the Center for Disease Control and Prevention (CDC), Atlanta, USA.
Available at: https://pt.wikipedia.org/wiki/Lair_Guerra_de_MacedoRodrigues
Table 1 – Continuation.

30
Heleno

Film premier on March 30th, 2012. Starring Rodrigo Santoro and winner of several awards, “Heleno” recalls the life of Heleno de Freitas, a spectacular soccer player from Botafogo, Rio de Janeiro. The athlete died at the age of 39, admitted to a sanatorium in the city of Barbacena, Minas Gerais. Heleno was diagnosed with syphilis by the doctors at the club, who accepted the player’s denial of treatment. The disease progressed to neurosyphilis. Brazil — and the world — lost an ace way too early in the art of soccer.
Available at: https://pt.wikipedia.org/wiki/Heleno_(filme). https://pt.wikipedia.org/wiki/Heleno_de_Freitas

31
National Day to Combat Syphilis and Congenital Syphilis

Law 13.430 was enacted by President Michel Temer. The Bill (PLC 146/2015), authored by the federal deputy for Rio de Janeiro, Chico D’Angelo, originated at the VI Congress of the Brazilian Society of Sexually Transmitted Diseases, in 2006, on a proposal initiated by the doctor and professor from the Fluminense Federal University, Mauro Romero Leal Passos.
Available at: https://www12.senado.leg.br/noticias/materias/2017/04/03/lei-cria-o-dia-nacional-de-combate-a-sifilis-e-a-sifilis-congenita

April

14
Tribute to Venus

“Tribute to Venus: the fight against syphilis in Brazil, from the turn of the century to the 1940s”, by Sérgio Luiz Carrara. Doctoral thesis defended in the Graduate Program in Social Anthropology at the National Museum of Universidade Federal do Rio de Janeiro. In 1996, due to solid research work, it was transformed into a book by Editora da Fiocruz, Rio de Janeiro. The author is a Full Professor at Universidade do Estado do Rio de Janeiro.
Available at: https://portal.fiocruz.br/livro/tributo-venus-luta-contra-sifilis-no-brasil-da-passagem-do-seculo-aos-anos-40

21
Antônio Austregésilo Rodrigues de Lima

Antônio Austregésilo Rodrigues de Lima was born in Recife, on April 21st, 1876. Considered the precursor of neurology in Brazil, he coined the expression “it is necessary to think syphilitically”, due to the high prevalence of the disease at that time (which, in fact, persists until today) and its characteristics of imitating countless other diseases, infectious or not.
Available at: https://pt.wikipedia.org/wiki/Ant%C3%B4nio_Austreg%C3%A9silo
Table 1 – Continuation.

21
Ulrich von Hutten

Ulrich von Hutten was born on April 21st, 1488. He was a German knight, scholar, and satirical poet, who later became a follower of Martin Luther and a Protestant reformer. In the last 15 years of his life, Hutten suffered from the “French disease” (or syphilis), from which he died. He wrote, in 1519, “De morbo Gallico” (about the French disease), in which he addressed the symptoms of what was thought to be syphilis and its treatment with Guaiacum. His text is considered one of the first patient narratives in the history of medicine. The portrait that the German painter Hans Holbein (the Young) made of Ulrich, in 1523, is the first known realistic portrait of a person with the disease. Available at: https://en.wikipedia.org/wiki/Ulrich_von_Hutten

25
Erich Hoffmann

Erich Hoffmann was born on April 25th, 1868. Hoffmann is remembered for his research with zoologist Fritz Schaudinn (1871–1906) at the Charité Clinic in Berlin. In 1905, Schaudinn and Hoffmann discovered the bacterium responsible for syphilis, a spiral-shaped spirochete called Treponema pallidum. The organism was removed from a papule on the vulva of a patient with secondary syphilis. The two doctors documented their findings in a treaty called Vorläufiger Bericht über das Vorkommen von Spirochäten in syphilitischen Krankheitsprodukten und bei Papillomen (Preliminary report on the occurrence of spirochetes in syphilitic disease products and papillomas, in free translation). Available at: https://en.wikipedia.org/wiki/Erich_Hoffmann

28
Syphilis Sive Morbus Gallicus

For the first time, the poem by Girolamo Fracastoro is fully published in a book containing photos of the original from 1530, in Latin, accompanied by the Portuguese version. Much of this Portuguese version was prepared by the Portuguese doctor Bettencourt Raposo, between the years 1883 and 1885. Part of it was presented in a magnificent book on syphilis, by Afrânio de Amaral, in 1966. Part of it was due to the tireless effort of the doctor, professor, and writer Maurício Romero Leal Passos who finished the Portuguese version, being the link between these works, in 2021. Released on April 28th, 2021, in Lisbon, Portugal. Available at: https://www.facebook.com/104281477586558/posts/451169352897767/

14
Pedro António Bettencourt Raposo

Pedro António Bettencourt Raposo was born on May 14th, 1853, in Lisbon, Portugal. Physician and surgeon at the Lisbon Civil Hospitals, he was also secretary and librarian at the Medical-Surgical School of the Portuguese capital. He wrote on Deontology and Jurisprudence for medical education reform. He founded the journal Medicina Contemporânea, in which he published, in Portuguese, chapters 1 and 2 of the book Syphilis Sive Morbus Gallicus, by Hyeronimi Fracastorii. Unfortunately, we found no records that Bettencourt Raposo has completed the translation of the aforementioned poem. Available at: http://memoria.ul.pt/index.php/Raposo_Pedro_Ant%3C%3B3%2C3%2C3%2Cio_Bettencourt

Continue...
16
Presidential apologies for the “Tuskegee Experience”

President Bill Clinton apologized publicly to the survivors of the “Tuskegee Experience” at an afternoon ceremony at the White House. The experience, which took place between 1932 and 1972, took about 400 black Americans with syphilis to go years without having the disease treated so that it could be better analyzed. During the process, they took drugs that had no effect, without knowing that they were not being treated.
Available at: https://www.cdc.gov/tuskegee/clintonp.htm. https://www.youtube.com/watch?v=1A-YP24QwA

16
Ilya Ilyich Mechnikov

Ilya Ilyich Mechnikov was born on May 16th, 1845. In 1903, Metchnikov and Roux discovered that syphilis was transmissible to monkeys, thus destroying the old theory that the disease was exclusively human and inaccessible for experiments (DSB 9: 334).
Available at: https://www.baumanrarebooks.com/rare-books/metchnikoff-elie/etudes-experimentales-sur-la-syphilis/76790.aspx

June

7
STD – Brazilian Journal of Sexually Transmitted Diseases

Official body of the Brazilian Society of STD, it was created on June 7th, 1989. First — and still the only — open scientific journal on the Internet in the area of STD in Latin America.
Available at: http://www.bjstd.org/

13
Syphilis Handout

Syphilis Handout sold to medical students in order to raise funds for the Graduation Committee of the 1st Class of 1981 at the Teresópolis Medical School, Rio de Janeiro, Serra dos Órgãos Educational Foundation. This action is possibly unique in Brazil. Edition of June 13th, 1980. Author: Mauro Romero Leal Passos. Collaborators: Renato de Souza Bravo and Adauto Hissa Elian.
Available at: https://www.youtube.com/watch?v=VLjt037w1Ut&t=940s. https://www.youtube.com/c/SBDSTSociedadeBrasileiradeDST/videos
Karl Landsteiner was born on June 14th, 1868 in Baden bei Wien, Austria-Hungary. Landsteiner introduced dark field microscopy for the diagnosis of primary syphilis and worked with several associates on the characteristics of Treponema pallidum. They were able to describe the mechanism that resulted in Wassermann’s reaction. Together with Ernest Finger and others, he found that the antigen, previously extracted from a patient with syphilis, could be replaced with an extract prepared from ox hearts for this test. In 1930, he received a Nobel Prize in Physiology or Medicine. Available at: https://jnnp.bmj.com/content/72/3/355. https://en.wikipedia.org/wiki/Karl_Landsteiner. https://en.wikipedia.org/wiki/Ernst_Finger

Walter Belda was born on June 20 in Mogi das Cruzes, São Paulo. Dermatologist and Sanitary Physician, professor at the Department of Epidemiology of the Faculty of Public Health of Universidade de São Paulo and responsible for the Area of Sanitary Dermatology. He was a leader, scholar by vocation, bearer of an enviable scientific hierarchy. Great scholar of STD, including syphilis. His university career began as a supernumerary assistant at the Dermatology and Syphiligraphy Clinic of the Faculty of Medicine of Universidade de São Paulo, having joined the teaching chair at the Chair of Venereology and Leprology at the Faculty of Hygiene and Public Health, led by Dr. José Maria Gomes. He participated in numerous epidemiological surveys on venereal diseases in the red-light areas of the capital and among workers. During the XV Brazilian Congress of Urology, in 1975, together with Drs. Corintho Santos and Altino Cattapan, he created the Brazilian UNION against Venereal Diseases, the mater cell of the Latin American UNION against Sexual Transmission Diseases (ULACETS). Available at: https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-89101988000200002

Karl Herxheimer was born on June 26th, 1861. He was a German Jewish dermatologist born in Wiesbaden. The Jarisch-Herxheimer reaction, an inflammatory response that he noticed after treatment for syphilis, was partially named after him. In some cases, patients with roseola (reddish or coppery/copper colored spots on the skin) due to syphilis, after the first dose of antibiotic against Treponema pallidum present this inflammatory response that can be mistaken for allergy (hypersensitivity) to the medication, especially if the antibiotic is penicillin. Available at: https://en.wikipedia.org/wiki/Karl_Herxheimer

Altino Catapan was born in Cittadella, Padova, Veneto, Italy on July 4th, 1912. He graduated from the University of Padova in 1935. He went to Africa in 1937, as a dermatologist, to work in the Italian colonies of Ethiopia, Abisinia, and Eritrea. In 1938, he became a prisoner in an English concentration camp, and was then tasked with looking after whorehouses. He remained in prison until the end of the war, when he returned to Italy. As his family was based in Brazil, he decided to move to the country, where he served as medical director of the pharmaceutical laboratory Zambom. In this position, he strongly supported the activities of continuing medical education and clinical research in the field of STD, being an important ally in the fight against them. He was the founder of the scientific societies União Brasileira contra as DST and Union Latino Americana contra las ETS. Available at: http://www.dst.uff.br/revista07-4-1995/5-%20TIANFENICOL.pdf
Table 1 – Continuation.

7
Foundation of the Brazilian Society of Sexually Transmitted Diseases

In 1988, the medical-scientific association was founded, using the headquarters of the Associação Médica Fluminense in Niterói, Rio de Janeiro, Brazil. SBDST holds traditional scientific congresses. Its 13th edition will take place this year, in June 2021. It is also responsible for the scientific journal STD – Brazilian STD Journal (DST - Jornal Brasileiro de DST), open on the internet.
Available at: https://www.facebook.com/dst.uff.7/photos/a.1013884041956857/4310655405613021/ https://www.facebook.com/dst.uff.7/

8
William Wallace

William Wallace (1791–1837). On July 8th, 1827, he published an article in “The Lancet” (Volume 28, Issue 723, pages 534–540) in which he documents that secondary syphilis lesions transmitted the disease. In his experiments, Wallace inoculated exanthematic ulcer secretions from two patients with secondary syphilis into three healthy subjects. With subsequent carefully documented clinical observation, he was able to demonstrate the transmissibility of secondary syphilis and its incubation period. Later, he treated the inoculated patients with mercury and “cured” them of syphilis.
Available at: https://sti.bmj.com/content/sextrans/41/1/9.full.pdf. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(06)68801-6/fulltext

12
Sir William Osler, Baronet

Sir William Osler, Baronet, was born on July 12th, 1849. Canadian physician and one of the four founding professors at Johns Hopkins Hospital. Osler created the first residency program for specialty medical training and was the first to take medical students from the classroom to clinical training at the bedside. He has often been described as the Father of Modern Medicine and one of the “greatest diagnosticians who ever wielded a stethoscope”. Osler was a person of many interests. In addition to being a doctor, he was a bibliophile, historian, author, and playful person. One of his accomplishments was the founding of the History of Medicine Society (previous section) of the Royal Society of Medicine, London. Syphilis was referred to as “the great imitator” by Sir William Osler because of its variety of clinical presentations.
Available at: https://books.google.com/books?id=fvUADCEt31MC&pg=PA101&hl=ptBR#v=onepage&q&f=false https://en.wikipedia.org/wiki/William_Osler

Complete Treponema Genome

On July 17th, 1998, Claire M. Fraser, together with several other researchers in the scientific journal Science (Vol. 281, 1998; 375-388), published an article detailing for the first time the complete sequence of Treponema pallidum.
Available at: https://science.sciencemag.org/content/281/5375/375.abstract

Continue...
Table 1 – Continuation.

23
Jonathan Hutchinson

Jonathan Hutchinson was born on July 23rd, 1828, Selby, the United Kingdom. He was an English surgeon, ophthalmologist, dermatologist, and pathologist. His parents belonged to the Religious Society of Friends. He discovered one of the rarest diseases in the world, Progeria. He described the serrated teeth as pathognomonic for congenital syphilis.
Available at: https://en.wikipedia.org/wiki/Jonathan_Hutchinson

26
Denunciation of the Tuskegee Study in The New York Times

In 1972, the American newspaper The New York Times published on its front page a report on the Tuskegee Study. The whistleblower, Peter Buxtun, provided Jean Heller (investigative journalist) with evidence that, for four decades, people enrolled in Tuskegee’s “study” had been deliberately denied treatment for syphilis. Years later, Heller called the story “one of the grossest human rights violations I can imagine”. Heller’s article exposing the unethical study was published in the Washington Star on July 25th, 1972, and made front-page news in The New York Times the following day. The exhibition earned Heller the Robert F. Kennedy Prize for Journalism, the Raymond Clapper Prize and the George Polk Prize.
Available at: https://www.nytimes.com/1972/07/26/archives/syphilis-victims-in-us-study-went-untreated-for-40-years-syphilis.html
https://en.wikipedia.org/wiki/Jean_Heller

26
Reuben Leon Kahn

Reuben Leon Kahn was born on July 26th, 1887 in Kovno, today Kaunas, Lithuania. Kahn conducted studies of blood reactions, which allowed him to develop an efficient test for the detection of syphilis (1923). This test has shown false results in some cases, for example, if patients had recently received vaccination or had other illnesses in addition to syphilis. However, it was more efficient than August von Wassermann’s longer test. Later, he also found tests for tuberculosis, malaria and leprosy. Kahn researched and taught at the University of Michigan.
Available at: https://de.wikipedia.org/wiki/Reuben_Leon_Kahn - https://www.britannica.com/biography/Reuben-Leon-Kahn

August

1
Constantin Levaditi

Constantin Levaditi was born on August 1st, 1874, A Romanian physician and microbiologist, he was an important figure in virology and immunology (especially in the study of polio and syphilis). In his studies on syphilis, Levaditi introduced new techniques in serology and recommended bismuth in the treatment of the disease.
Available at: https://en.wikipedia.org/wiki/Constantin_Levaditi

Continue...
Table 1 – Continuation.

Alexander Fleming

Alexander Fleming, was born on August 6th, 1881. In 2021, it is 140 years since his birth. He discovered penicillin, the most effective antibiotic to date for treating syphilis, at all stages.
Available at: https://en.wikipedia.org/wiki/Alexander_Fleming

Girolamo Fracastoro

Girolamo Fracastoro (Hieronymi Fracasrorii, Latin name as it appears in his work). He died on August 8th, 1553. We have his birth year, 1478, but not the date. He was a doctor, writer, author of the book Syphilis, Sive Morbus Gallicus (Syphilis or French Evil), published in Verona in 1530. This work, written in Latin, brings the first record of the word syphilis.
Available at: https://en.wikipedia.org/wiki/Girolamo_Fracastoro

Oscar da Silva Araújo Nasceu

Oscar da Silva Araújo, born on August 26th, 1886, in Rio de Janeiro, was one of the first and greatest Brazilian venereologists and syphilographers.
Available at: http://www.anm.org.br/oscar-da-silva-araujo/

September

King K. Holmes

King K. Holmes was born on September 1st, 1937. From St. Paul, Minnesota, in the United States, he is the founder and director of the University of Washington's AIDS and STD Center and a contributor to the World Health Organization AIDS and STD Center. Author of hundreds of peer-reviewed scientific articles and dozens of textbooks. The publication “Sexually Transmitted Diseases”, in its fourth edition, with 1,168 pages, is currently the most traditional and important medical textbook on STD.
Available at: https://depts.washington.edu/cfar/discover-cfar/cores/administrative/ king-k-holmes

André Siboulet

André Siboulet was born on September 8th, 1917. He was a doctor and director of the Alfred Fournier Institute, Research Center for Sexually Transmitted Diseases, in the city of Paris, and president of the International Union against Venereal Diseases.
Available at: https://en.wikipedia.org/wiki/Alexander_Fleming
Table 1 – Continuation.

|   |   |
|---|---|
| 19 | Fritz Richard Schaudinn |
|   | Fritz Richard Schaudinn, German zoologist, was born on September 19th, 1871, East Prussia. He co-discovered, with Erich Hoffmann, in 1905, the causative agent of syphilis, Spirochaeta pallida. The work was carried out at the Berlin Charité. Available at: https://en.wikipedia.org/wiki/Fritz_Schaudinn |
| 22 | Francisco Eduardo Rabello |
|   | Francisco Eduardo Rabello was born on September 22nd, 1823. From Barra Mansa, he is a Professor of Dermatology and Syphilography at the School of Medicine of Rio de Janeiro. He was a founding partner and director of the Gaffré and Guinle Foundation (1923) and a full member of the National Academy of Medicine (1917). Considered one of the greatest scholars of Brazilian syphilis, he spread the term “to think syphilitically”, created by Antônio Austragélilo Rodrigues de Lima. Available at: https://pt.wikipedia.org/wiki/Eduardo_Rabello |
| 28 | Creation of the Sexually Transmitted Diseases Sector |
|   | Creation of the Sexually Transmitted Diseases Sector, on September 28th, 1988, of the Department of Microbiology and Parasitology of the Biomedical Institute of Universidade Federal Fluminense. The sector is dedicated to teaching, research, and extension, mainly in outpatient care for patients with or suspected STD. By 2020, it served more than 40,000 people and has 15,000 registered medical records. Available at: https://www.facebook.com/dst.uff.7 |
|   | October |
| 1 | USA apologizes for unethical research in Guatemala |
|   | USA apologizes for intentionally infecting Guatemalans with STD, including syphilis, in an unethical “research” in the 1940s. In 2010, the then President of the United States, Barack Obama, called Guatemalan President Alvaro Colom to apologize for the research carried out by the American Public Health Service between 1946 and 1948. During the study, people in Guatemala were intentionally infected with sexually transmitted diseases. Available at: http://edition.cnn.com/2010/WORLD/americas/10/01/us.guatemala.apology/index.html |
| Stage | Event Description |
|-------|-------------------|
| 16    | National Day to Combat Syphilis and Congenital Syphilis (third Saturday in October). Established by Law 13.430, of March 31<sup>st</sup>, 2017, sanctioned by the then President Michel Temer. Authored by Congressman Chico D’Angelo, Complementary Law Project 146/2015 originated at the VI Congress of the Brazilian Society of Sexually Transmitted Diseases, in 2006, on a proposal initiated by the doctor and professor at Universidade Federal Fluminense, Mauro Romero Leal Passos. Available at: https://www12.senado.leg.br/noticias/materias/2017/04/03/lei-cria-o-dia-nacional-de-combate-a-sifilis-e-a-sifilis-congenita |
| 19    | Memoirs of a Barber Surgeon, Romance by Heitor Rosa |
|       | Memoirs of a Barber Surgeon, a novel by Heitor Rosa released on October 19<sup>th</sup>, 2006 during the XI Congress of History of Medicine, in Goiânia, Goiás, about the life of Giriâmo Fracastoro (as Heitor wrote), author of the poem Siphylis sive morbus gallicus. The story is told by Fracastoro's assistant, barber-surgeon Gioacchino dalla Rosa. Rosa's masterpiece, award winning physician and professor of gastroenterology at the School of Medicine of Universidade Federal de Goiás. The novels Barber and Judgment were the result of years of study by Hector in England and France. Available at: https://pt.wikipedia.org/wiki/Heitor_Rosa |
| 27    | Louis Mathieu Fréderic Adrien Tribondeau |
|       | Louis Mathieu Fréderic Adrien Tribondeau was born on October 27<sup>th</sup>, 1872 in Sète (Herald, France). He developed, together with Fontana, the method of visualizing Treponema pallidum from scrapings of recent syphilis lesions (primary or secondary), using ammoniacal silver nitrate solution, known as the Fontana-Tribondeau technique. Unfortunately, we were unable to recover the data on Fontana, only quotes that he was a friend of Louis Tribondeau. Available at: https://ihmcs.fr/IMG/pdf/memoire_master_louis_tribondeau.pdf |
| 30    | Gerhard Johannes Paul Domagk |
|       | Gerhard Johannes Paul Domagk was born on October 30<sup>th</sup>, 1895. German pathologist and bacteriologist, awarded the 1939 Nobel Prize in Physiology or Medicine, for discovering the antibacterial effects of Sulfonamidochrysoidine (KI-730). The substance was the first commercially available antibiotic (under the brand name Prontosil). Available at: https://en.wikipedia.org/wiki/Gerhard_Domagk |
November

1
Joseph Parrot

Joseph Parrot was born on November 1st, 1829. This French doctor described Parrot’s pseudoparalysis as a finding in children with congenital syphilis. It consists of pseudoparalysis of one or more extremities of babies, resulted from osteochondritis due to syphilis of an epiphysis. It is called pseudoparalysis provided it is reversible through therapy.

Available at: https://commons.wikimedia.org/wiki/Category:Joseph_Marie_Jules_Parrot

1
Mary C. Pangborn

Mary C. Pangborn, on November 1st, 1941, published her work on isolation and purification of an ox heart extract phospholipid, the antigen of the Wasserman test for syphilis used since 1922, which she identified as cardiolipin. This discovery was soon adopted worldwide as a practical test for syphilis. Dr. Pangborn was the senior author of the World Health Organization Report on Cardiolipin Antigens in 1951, revised in 1955 and the last of only three articles she published. However, all classics, for which she won many national (USA) and international awards.

Available at: https://journals.sagepub.com/doi/abs/10.3181/00379727-48-13365P

5
Candido Gaffrée

Candido Gaffrée was born on November 5th, 1845. Together with Eduardo Palasin Guinle, he created the important and remarkable Gaffrée and Guinle Hospital, with the initial objective of being a center of attention to venereal diseases, mainly syphilis and gonorrhea, that plagued the city of Rio de Janeiro. Today, it is the Gaffrée and Guinle University Hospital (Hospital Universitário Gaffrée e Guinle), a fundamental part of Universidade Federal do Estado do Rio de Janeiro (UNIRIO).

Available at: https://www.intrinseca.com.br/blog/2015/10/o-resgate-de-candidogaffree/ https://pt.wikipedia.org/wiki/C%C3%A2ndido_Gaffr%C3%A9e

12
Joseph Rollet

Joseph Rollet was born on November 12th, 1824, in Lagnieu, France. In 1865, he described Rollet’s Mixed Cancer (hard tumor by Treponema pallidum + soft tumor by Haemophilus ducreii).

Available at: https://fr.wikipedia.org/wiki/Joseph_Rollet
| 15 | First World Congress and Third Latin American Congress on Sexually Transmitted Diseases |
|----|-------------------------------------------------------------------------------------------------|
|    | First World Congress and Third Latin American Congress on Sexually Transmitted Diseases, held between November 15th and 21st, 1981, in San Juan, Puerto Rico. |
|    | Available at: https://sti.bmj.com/content/sextrans/58/3/204.full.pdf |

| 18 | José Serruya |
|----|------------------------------------------------------|
|    | José Serruya was born on November 18th, 1933. Important professor of dermatology, syphilography, and venereology in Rio de Janeiro, Rio de Janeiro. |
|    | Available at: http://www.anaisdedermatologia.org.br/detalhe-artigo/368/InMemoriam-%E2%80%93-Jose-Serruya-%E2%80%93-1933-1986 |

| 20 | Syphilis Exhibition |
|----|---------------------|
|    | Syphilis Exhibition: history, science, and art. Opening project of the exhibition on the most diverse aspects of history, science, and arts involving the syphilis theme. It will be on the third floor of the Paço Imperial, Praça XV de Novembro, Downtown, Rio de Janeiro. The exhibition is the result of a set of researches carried out by professionals from various institutions: Department of Diseases of Chronic Conditions and IST of the Health Surveillance Secretariat of the Ministry of Health, Cultural Center of the Ministry of Health, Pan American Health Organization, Brazilian STD Society, Laboratory of Technological Innovation in Health at the Universidade Federal do Rio Grande do Norte, STD Sector at Universidade Federal Fluminense, and others. The exhibition will take place from November 20th, 2021 until February 28th, 2022. This is our proposal. |
|    | Available at: https://www.facebook.com/S%C3%ADfilis-hist%C3%A9ria-e-arte-101990261855394 |

| 29 | Jean-Martin Charcot |
|----|------------------|
|    | Jean-Martin Charcot was born on November 29th, 1825, in Paris. French physician and scientist, he achieved fame in the field of psychiatry and neurology in the second half of the 19th century. He was considered one of the greatest clinicians and professors of medicine in France and, together with Guillaume Duchenne, the founder of modern neurology. The first to describe neuropathic arthropathy, neuropathic osteoarthropathy or Charcot joint, which corresponds to the progressive degeneration of a joint of the feet, legs or pelvis (joints responsible for carrying the body’s weight). It is a process marked by bone destruction, bone resorption and eventual deformity due to loss of sensation over many months or years, a situation seen in tertiary syphilis. |
|    | Available at: https://fr.wikipedia.org/wiki/Jean-Martin_Charcot |
Afrânio Pompilio Gastos do Amaral was born on December 1st, 1894. Born in Belém do Pará, he directed the Butantã Institute shortly after its creation, in two phases: from 1919 to 1921 and from 1928 to 1938. He was on the cover of Time magazine in 1929, as the central character of the report “Snakes”, due to his work in Butantã. Author of a precious book on the history of medicine: “SYPHILIS — disease and term — Through History”, a work awarded with the Arnaldo Vieira de Carvalho award, by Sociedade Paulista de História da Medicina in 1959. In the book, Afrânio do Amaral discusses the Latin poem “Syphilis Sive Morbus Gallicus”, possibly being the most important work on the history of the word syphilis ever published in Brazil.

Available at: https://pt.wikipedia.org/wiki/Afr%C3%A2nio_do_Amaral

Philippe Ricord was born on December 10th, 1800. In 1838, the French doctor refuted John Hunter’s experience, showing that syphilis and gonorrhea are not the same disease. Ricord’s skin cancer is the initial parchment-like lesion of syphilis.

Available at: https://fr.wikipedia.org/wiki/Philippe_Ricord

Alfred Louis Charles de Musset was born on December 11th, 1810, in Paris. French poet, novelist, and playwright of the 19th century, one of the exponents of the literary period known as Romanticism. He gives his name to the “Musset’s sign” (a rise and fall of the head following the heartbeat), a symptom caused by syphilitic aortitis, perceived by the writer primarily in himself.

Available at: https://en.wikipedia.org/wiki/Alfred_de_Musset

Edvard Munch was born on December 12th, 1863 in Ådalsbruk, Norway. This painter was one of the precursors of German impressionism and expressionism. His work “Inheritance” portrays a well-dressed woman, wiping tears, with a child with syphilis on her lap. It depicts the vertical transmission of syphilis, congenital syphilis. We observed at https://www.josepocas.com/2018/09/a-heranca/ that the artist painted two paintings with the same title, one in 1905 and the other in 1906. It is possible to notice differences between the characters and their clothing.

Available at: https://en.wikipedia.org/wiki/Edvard_Munch https://pt.wikipedia.org/wiki/Edvard_Munch https://pt.wahooart.com/@@/8XXH5N-Edvard-Munch-Heran%C3%A7a
Paracelsus, pseudonym of Philippus Aureolus Theophrastus Bombastus von Hohenheim. He was born on December 17th, 1493. Swiss-German physician, alchemist, physicist, astrologer, and occultist. He is also credited with creating the name of the element zinc, calling it zincum. Paracelsus appears among scientists and reformers like Andreas Vesalius, Nicolau Copérnico and Georgius Agricola, and, therefore, seen as a “modern”. On the other hand, he always possessed an aura of mysticism and even the dark reputation of a wizard. He treated syphilis with mercury.

Available at: https://en.wikipedia.org/wiki/Paracelsus

Pierre Paul Émile Roux was born on December 17th, 1853. A French physician, bacteriologist, and immunologist, Roux was one of the closest collaborators of Louis Pasteur (1822–1895), co-founder of the Pasteur Institute and responsible for the production of anti-diphtheria serum, the first effective therapy for this disease. In 1903, Metchnikoff and Roux discovered that syphilis was transmissible to monkeys, thereby bringing down the old theory that the disease was exclusively human and inaccessible for experiments.

Available at: https://en.wikipedia.org/wiki/Pierre_Paul_%C3%A9mile_Roux

Claude Quétel was born on December 30th, 1939. A French historian and teacher born in Bernières-sur-Mer (Calvados). Author of two dozen books, he won several awards for his work, including the “Prix Marianne 2015”, with “The scary Doctor Petiot — crazy or guilty?”, “Prix Therouanne 1982”, with “De par le Roy: Essay on stamp letters”, and “Prix Therouanne 1989” (silver medal) for La Bastille. His book “Le Mal de Naples: histoire de la syphilis”, Editions Seghers (Paris, 1986) is a rare work that deserves all our applause. It has been translated into English.

Available at: https://en.wikipedia.org/wiki/Claude_Qu%C3%A9tel#cite_note-1. https://www.franceinter.fr/personnes/claude-quetel

Participation of each author

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