SEXUAL MEDICINE HISTORY

History of Syphilis: Between Poetry and Medicine

Ismael Maatouk, MD* and Roy Moutran, MD†

*Faculty of Medicine of Saint Joseph University, Hôtel-Dieu de France University Hospital, Beirut, Lebanon; †Head of Dermatology Department, Mount Lebanon Hospital, Beirut, Lebanon

DOI: 10.1111/jsm.12354

ABSTRACT

Introduction. The origin of syphilis is a matter of debate and two "historical" hypotheses explain its emergence.
Aim. We present here a review about syphilis history.
Methods. A review of literature about syphilis history using the following keywords: "syphilis," "history," and "treponema."
Results. The Columbian opinion is that syphilis came from the New World (America) with the crews of Christopher Columbus's fleet. As Naples fell before the invading army of Charles the VIII in 1495, a plague broke out among the French leader's troops. When the army disbanded shortly after the campaign, the troops, composed largely of mercenaries, returned to their homes and disseminated the disease across Europe. Indeed, there were reports that indigenous peoples of the New World suffered from a similar condition.
Conclusion. Regardless of the Columbian and the Pre-Columbian theories, syphilis remains an international disease, growing nowadays with HIV infection. Despite history, politics, paleopathology and molecular approaches, the origin of the disease remains an enigma. **Maatouk I and Moutran R. History of syphilis: Between poetry and medicine. J Sex Med 2014;11:307–310.**

Key Words. Syphilis; History; Treponema Pallidum; Modern Risk Factors

The origin of syphilis is a matter of debate, and two "historical" hypotheses explain its emergence [1]. The Columbian opinion is that syphilis came from the New World (America) with the crews of Christopher Columbus's fleet. As Naples fell before the invading army of Charles the VIII in 1495, a plague broke out among the French leader's troops [2]. When the army disbanded shortly after the campaign, the troops, composed largely of mercenaries, returned to their homes and disseminated the disease across Europe [3]. Indeed, there were reports that indigenous peoples of the New World suffered from a similar condition [3,4].

This "new disease" was also called "Mal de Naples" ("Mal" means disease). Mal of Saint Mevius (Germans); Saint Sement (the people of Valencia, Catalans, The Aragonese); Saint Job; Saint Evagrius, Saint Roch, Sainte Reine, etc. Syphilis had more than 50 appellations that correspond to saints believed to help healing the disease [5]. These attributions reflect the fact that people wanted to clear their responsibility for the dissemination of this rapid and unknown disease ("morbo rapido et incognito"). Furthermore, each population blamed its "enemy" of being responsible for the disease. Thus, syphilis was synonym to "Male Francese" (for Italians), "Franzosen" or "frantzosischen Pocken" (for Germans), spanse Pocken (for Dutch); Mal Espagnol (for Africans, Moors), Mal Castillan (for Portuguese), Mal des Portuguais (for East Indians and Japanese), French evil or Christian evil (for Turkish and people of the Mediterranean), Turk Evil (for Persians), and Polish sickness (for Muscovites) [6].

With the development of shipping and trade, the disease quickly became global. Charles Jules Henry Nicolle (1866–1936), French bacteriologist (Nobel Prize for Medicine in 1903) and a supporter of the theory of American origin of syphilis, confirmed in his book *Birth, Life and Death of Infectious Diseases* that "syphilis gives us the example of a disease that came from a distant land to our country" [7].

The disease was first mentioned by Grünpeck in 1496 in *De pestilentiali sorra* and was attributed to astrological origins. In 1503, Grünpeck called it "mentulagra" (sickness of the "mentula," the male genitals) in his book *De mentulagra* and he considered it to be a "filthy" contagion ("sordid contagio"). But it is the physician, geographer, and poet Girolamo Fracastoro (1478–1553) who was the first to use the term "syphilis" in 1530 in a Latin poem titled "Syphilis sive morbus gallicus" published in three books [1,8–10]. In book I, he described the evolution of the disease: incubation (I, 319,329), first lesions (I, 330,331), secondary dissemination (I, 344,346), other forms and variants (I, 347,364). He described the disease as being a source of defilement and disgrace ("lues" cited seven times). He stated that this "vulgar" disease was born in the west of the Atlantic seas, over those unhappy recently discovered edges.

> Oceano tamen in magno sub sole cadente,
> Qua misera inventum nuper gens accolit orbem,
> Passim oritur, nullisque locis non cognito vulgo est. [6]

In books II and III, Fracastoro discusses the main treatments of syphilis in his era: mercury and guaiacum, the "sacred wood of the American Indians" [6].

In book III, written in 1530 at the insistence of Cardinal Bembo (to whom the work was dedicated [6]), Fracastoro told the story of a Greek shepherd, Syphilus, who led a revolt against the god of the Sun and suffered later from this disease [6]. It was thought that through the character of Syphilus, Fracastoro was referring to Sypilus, one of the 11 sons of Niobe, who was cursed by Apollo, god of the Sun [9]. Syphilus suffered this terrible fate, because his mother (Niobe) claimed that her children were more beautiful than Apollo [11]. This myth took place on the summits of Mount Sipylos in Phrygia [12]. We do not know more about the etymology of the words "syphilis" and "syphilus." The majority of Renaissance authors used the term "syphilis" after Fracastoro had mentioned Syphilus's myth in his book ("syphilidemque ab eo labem dixere coloni"). Andre du Laurens and Fallopio justified the etymology of "syphilis" as meaning lover of swine (from the Homeric Greek or Latin "sus" and Greek "philos").

Fracastoro did not mention the transmission of this contagious disease. Only 16 years later, he discussed sexual transmission of syphilis in *De Contagione* (1546) [13].

This "American" hypothesis of the origin of syphilis, based on the chronological coincidence between the discovery of America in 1492 and the epidemic of Naples in 1494, was refuted later by other authors who thought that syphilis is an European disease (Pre-Columbian origin) not distinguished from other diseases such as leprosy prior to 1495 [14].

It was later recognized that different varieties of treponemal disease exist: syphilis (*Treponema pallidum* subspecies *pallidum*); endemic syphilis or bejel (caused by ssp. *endemicum*) historically affecting people living in hot climates; yaws (caused by ssp. *pertenue*) limited to hot and humid areas; and pinta (caused by *Treponema carateum*).

Today, the debate over the origin of treponemal disease encompasses arguments about whether the four infections are caused by distinct but related pathogens [15] or by one bacterium with many manifestations [16]. Hackett, a convinced pre-Columbianist, proposed a scheme of mutational development linking the four treponemal diseases in 1963 [17].

Paleopathologists have played a pivotal role in addressing the question surrounding the origin of syphilis. The treponemal diseases, with the exception of pinta, leave distinct marks upon the skeleton and can thus be studied in past civilizations.

Skeletal evidence from many pre-Columbian sites in the New World indicates a high prevalence of treponemal disease paired with a low age of infection and an apparent absence of lesions attributable to congenital syphilis [18]. This suggests that a nonvenereal form of the disease, similar to modern day yaws or bejel (not passed on through the placenta) was present. Due to differences in climate, clothing, and sexual practices, Renaissance Europe would have represented a very different environment than that present in Hispaniola, the location of Columbus's first arrival in the New World. The bacterium responsible for treponemal disease, *Treponema pallidum*, would thus have encountered a very new set of selective pressures upon arrival in the Old World. Perhaps it was the exposure to this novel host environment that resulted in the birth of the *T. pallidum* subspecies that causes syphilis (*T. pallidum* ssp. *pallidum*). Thus, in this modified Columbian hypothesis, Columbus and his crew could have transported a New World, nonvenereal treponemal infection to Europe upon their return, which, once there, could have responded to dramatically different selection pressures with a new sexual transmission strategy [19].