SHORT COMMUNICATION

Mystery of Origin of Syphilis Revealed

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Abstract

Syphilis is one of the oldest diseases known to humans. Its history is as old as history of humans. Syphilis affects sexually active people (15-65 years). Society has laid golden rules for humans. When they get sexually matured, family members arrange marriage, they can have sexual satisfaction, and also can continue their progeny. Society expects them to follow "Monogamy and Monoandry".

If humans ignore the golden rule of monogamy and monoandry, and indulge in indiscriminate sexual activity, they suffer from sexually transmitted diseases (STDs). Syphilis has been the commonest STDs, troubling humans since ages. On literature search regarding its origin, it can be said that history of syphilis is mysterious. Three important theories explain the origin of syphilis and they are- 1) Columbus theory, 2) Hudson theory, and 3) European universal theory.

Keywords: Syphilis, STDs, Columbus theory, Hudson theory, European universal theory

Introduction

Syphilis is one of the commonest sexually transmitted diseases (STDs) affecting humans in their sexually active age (15 to 65 years). Syphilis is commonly transmitted due to an unprotected act of sex, though congenital syphilis and syphilis without sexual act have also been described. Syphilis is caused by a spirochete called *Treponema pallidum var Hominis* (TP).

TP is a fine, motile, spiral organism, measuring 6-20 μ m in length and 0.1 to 0.18 μ m in thickness, with characteristic motility. It has regular spirals which help in differentiating from other non-pathogenic Treponema. The minimum number of organisms necessary to produce successful infection is 57. Biological multiplication time of TP is 30 hours. Treponema concentration generally reaches $10^7/g$ of tissue before any clinical lesion appears. The median incubation period in humans is 21 days (9-90 days). An average inoculum of 500-1000 infectious

organisms is deposited during sexual intercourse. During 15th and 16th century, syphilis was more prevalent and mortality was very high due to unavailability of effective treatment. Hence the disease was called 'Great pox' (In comparison with the deaths caused by smallpox during the same time). The virulence of the organism has been reduced in recent times, but infectivity is still high, and the disease is prevalent all over the world.

Columbus Theory

This popular theory states that the sailors of Columbus ships would have brought syphilis on their return from the New World (Haiti) in 1493, and spread the disease in Europe.¹ The King Ferdinand and Queen of Spain instructed Columbus on September 1493 to go to South India and buy spices. He was given three ships with 66 crew members. He sailed towards east to come to India. For the first three days, the journey was pleasant and on 4th day, sea hurricane twisted the direction of ships

from east to west direction, and at the end of one month (12.10.1493), he reached an island which today we call Haiti (America). He thought he discovered India. The King of Spain had described how Indians look; they are short, wheatish, humble, respect visitors, and are friendly. In Haiti, Columbus found tall, red, rough, quarrelsome people, and he called them Red Indians. The Columbus sailors were exploring the island searching for spices and condiments when they saw Red Indians having sex with small camels called Llamas. Sailors had sex with these animals, and brought these animals to Spain and gave them to members of the Royal family. Royal family members who had sex with these animals were satisfied, and gave these animals as Royal gift to the counterparts of the neighboring countries. They too had sex with these animals and after few months, many of them who had sex with these animals developed ulcers on their genitals and soon the disease started spreading to other parts of the body. Finally, people started dying from this new disease. People all over Europe started naming this disease with the names of the countries they contacted this disease from. A few popular names discussed in those days were- "Spanish disease, French disease, Italian disease, the German disease, the Nepolitan disease, the Christian disease, the Polish disease, Venus disease, Lues Venera, Social disease, and Great Pox". In 1521, Girolamo Fracastorius, a physician and poet, wrote a poem in Sunday newspaper, and the title of the poem was "Syphilis Sive Morbus Gallicus". Fracastorius described in detail, how this disease was brought by Columbus sailors from New World, and spread in Europe, how an imaginary shepherd 'Syphilis' suffered from this disease, how it progressed and finally killed him. All the leaders, doctors, read the poem and realized that this poem explained the summary of the new disease, and the name of the imaginary shepherd mentioned was 'Syphilis'. The poem explained the details of this disease, and did not condemn any country's name, and the name given to this new disease was Syphilis. All leaders and physicians accepted the name and even today, this disease is called Syphilis. This theory is supported by the documents prepared by two physicians 1) Fernandez de Oviedo and 2) Ruy Diaz de Isla. They were asked by King Ferdinand of Spain to go to the New World and find the details about the new disease. Both the physicians found that this new disease was known in New World, and the local people were treating it with extract of Guaiacum tree. Both the physicians also recorded that this new disease was not known in Europe, till Columbus returned from New World in 1493 to Spain (Europe).^{2,3}

A travel magazine published in October 1961, number 49, described that Columbus gave gonorrhea and alcohol to Haitians and brought syphilis and tobacco from Haitians to spread it in Spain (Europe).

Pusey wrote an article in the Journal of American Medical Association stating that the exact date of the history of Syphilis began with the discovery of New World America. Columbus and his sailors returned from Haiti in 1493, and brought this disease to Europe. Europeans spread the disease to the entire world in few years.⁴

Hudson Theory

Hudson wrote scholarly articles in 1958, 1963, and 1965 regarding the origin of Syphilis. The subtypes of Treponema are four. They are 1) Treponema pallidum hominis which causes venereal syphilis. 2) Treponema pallidum pertenue which causes yaws. 3) Treponema pallidum endemicum which causes endemic syphilis, also called bejel. 4) Treponema pallidum carateum causes pinta. Hudson believed that syphilis, yaws, bejel and pinta were just different epidemiological patterns of the same disease, having similar clinical features, same laboratory findings, and all of them were cured with same medicines. All these infections were common and endemic in Central African Negros. These people started moving from humid Central Africa to drier regions, Europeans started exploring Africa, slowly brought civilization, urbanization, education to these socially unenlightened people. People started wearing clothes all the time, and only at the time of sexual act, they came intimately closer to each other. Endemic treponematoses became venereal treponematoses because of civilization, urbanization, education of people. As people started moving from one place to another for hunting purpose, slavery trade, wars, the disease started spreading from Africa to Asia and to Europe. Hence the origin of syphilis was from Africa.5-7

European Universal Theory

Castiglione, the medical historian stated that syphilis was noted in Europe before the arrival of Columbus; most of the times was mistaken for leprosy. He also stated that Columbus and his crew must have brought more virulent form of Treponema from New World to Europe; hence the disease spread fast all over the world and was more fatal. Syphilis was known in India, the first reference to this disease and treatment was found in Ayurvedic book called Bhavaprakasa, written by Bhavamisra. Similarly, syphilis was also described in many other countries.

Conclusion

All the three theories explain the origin of syphilis in different contexts. Columbus theory highlighted syphilis, mainly as a public health problem created in 16th century. Hudson theory explained how civilization, urbanization, and education changed the behavior of people, who started practicing hygienic practices; hence endemic disease has changed to venereal disease. European theory explained that sex is a universal basic instinct of all living creatures; thus sexually transmitted diseases are common to all living creatures. Hence syphilis is prevalent all over the world.

Conflict of interest

Nil

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