

SYPHILIS IN THE THIRD MILLENNIUM

ANA-MARIA MONU*, LORENA LOGHIN*, MIHAELA GABRIELA ADAM*, NICOLETA-BIANCA GEORGESCU*, LAURA GHEUCĂ-SOLOVĂSTRU*, **, DAN VÂȚĂ*, **

Summary

Syphilis, a sexually transmitted infectious disease in most cases, is the main venereal disease in the world and is one of the most important problems of modern medicine, although its incidence is steadily decreasing.

Material and methods: We conducted a retrospective study, over a period of 3 years, on the main forms of Syphilis (primary syphilis, secondary syphilis, latent syphilis, congenital syphilis, neurosyphilis), which included a total of 105 patients hospitalized in the Dermatovenerology Clinic of the "Sf. Spiridon" Emergency County Clinical Hospital, Iasi, from 2016 to 2018.

Results: This article highlights the incidence of the different clinical forms of lues found in the studied patients: Primary syphilis with an incidence of 15%, Secondary syphilis 26%, Early latent syphilis 28%, Late latent syphilis 20%, Early congenital syphilis 4%, Late congenital syphilis 7%, results similar to data in the specialized literature.

Keywords: Syphilis, Lues, neurosyphilis, sexually transmitted disease, birth defects.

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Introduction

Syphilis is the main venereal disease in the world and is still one of the most important problems of modern medicine, although its incidence is decreasing continuously. Ever since the 16th century, syphilis has been the most feared sexually transmitted disease worldwide. This disease has a chronic, undulating evolution, and it is transmitted through the skin and mucous membranes, the causative agent being *Treponema pallidum*. [1,2,3]

Clinically, there are two stages of the disease. The first stage is newly infected syphilis, which includes primary syphilis, secondary syphilis and early latent syphilis with an evolution of up to 1 year. Non-infectious late syphilis is the second stage and is divided into tertiary syphilis and late latent syphilis (> 1 year from the time of infection).

The annual incidence of syphilis globally is estimated at 12 million new cases, most of which are in Asia and Africa. In France, 10,000 cases are

reported annually, in England 60,000, and in America 100,000 cases. Over 300,000 foetal deaths are attributed to syphilis. [4,5,6]

In Romania, the incidence of syphilis has had an undulating evolution in recent decades. There was an upward trend in the incidence for the period 1980-2002. From 2002 and until now it has maintained a linear decrease, but it remains one of the highest incidences of syphilis in the European Union. It has been suggested that the population movement would favour the spread of sexually transmitted diseases. Thus, in Romania higher incidence rates have been highlighted in the big cities, such as Constanța, a large port with openings on the Black Sea and in the capital city, Bucharest. [7]

Material and method

We conducted a retrospective, observational study, which included a batch of 105 patients, who are in the records of the Dermatovenerology Clinic of the "Sf. Spiridon" Emergency County

* Dermatovenerology Clinical Section, Emergency County Clinical Hospital "Saint Spiridon" Iași.

** Dermato-venerology discipline - U.M.F. "Grigore T. Popa", Iași.

Hospital, Iași, with the diagnosis of syphilis, investigated during the time period 2016-2018. For each case included in the study, the following data were retained: sex, age, place of origin and disease status.

Results

Out of the 105 patients diagnosed with syphilis in the period 2016-2018 within the Dermatovenerology Clinic of the "Sf. Spiridon" Emergency County Hospital, Iași, 62% were male and 38% female. There was a male/female ratio of 1.62 (Fig. 1) As regards the place of origin, patients in the urban area predominate.

The incidence by age groups showed the highest values in patients aged 15-49 years, this being the sexually active period (Fig. 2).

Following the annual distribution of the investigated cases, there is a linear decrease in the number of new cases of syphilis in the 3 years included in the study (Fig. 3).

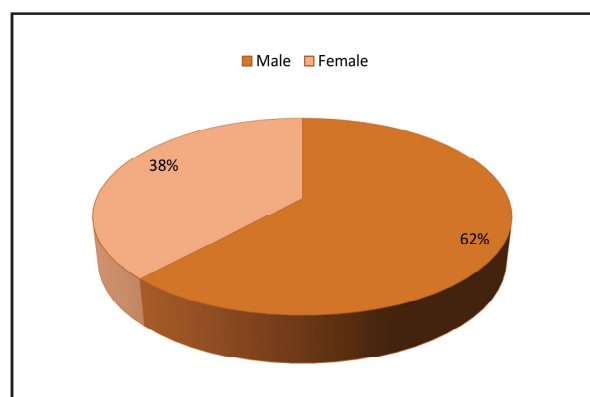


Figure 1. Distribution of syphilis cases by sex

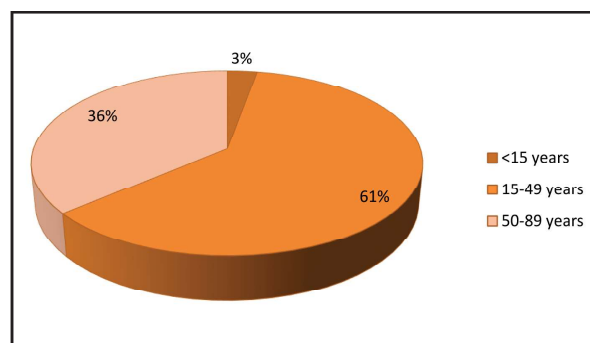


Figure 2. Distribution of patients by age groups

Out of the 105 patients examined, most were diagnosed with early latent syphilis (28%), the second most frequent being those with secondary syphilis (26%). The other stages of the disease were found to be: 20% cases (late latent syphilis), 15% (primary syphilis), 7% (early latent congenital syphilis), 4% (late latent congenital syphilis). During the period 2016-2018, a single patient with neurosyphilis was diagnosed (Fig. 4).

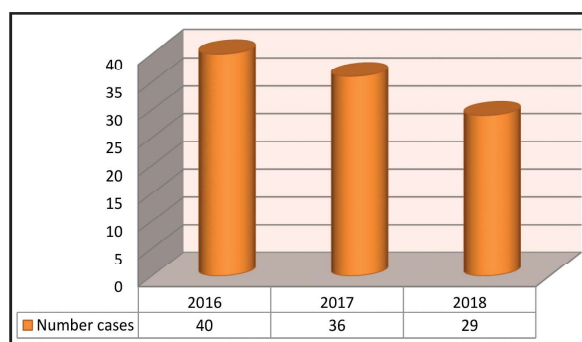


Figure 3. The incidence of new cases of syphilis in 2016-2018

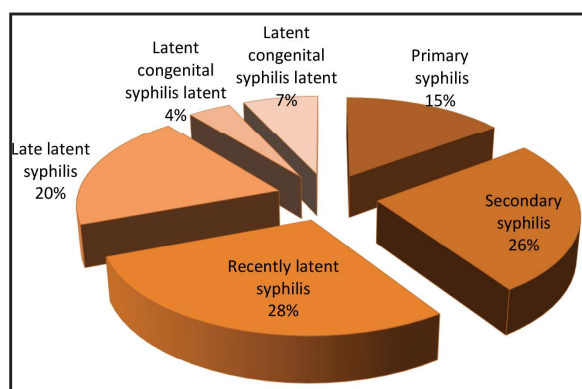


Figure 4. Distribution of cases by disease stages

Discussions

Annually, there are approximately six million new cases of syphilis globally in people between the ages of 15 and 49. [8]

In our country, in the last 50 years, the highest morbidity was in 1972 (27 cases per 100,000 inhabitants) and the lowest in 1982 (5 cases per 100,000 inhabitants). In 2007, Romania registered the highest incidence of syphilis in the European Union. [7,9]

In a study analysing the epidemiological data on syphilis cases in the population of Belgrade, Milan Bjekic et al. pointed out that the incidence of lues was higher in male patients. The ratio of men/women among the patients included in our study was 1.62, the result being consistent with the data obtained by Milan Bjekic et al. [10]

Similar to our study, in which young adults (15-49 years old) were found to be predominantly affected, studies from other authors also showed the prevalence of syphilis cases during the sexually active period (15-49 years).

The increased prevalence of syphilis cases in urban areas may be due to both better medical supervision and easier access of the population to medical services, which leads to higher rates of diagnosis and appropriate case reporting.

The performed study showed a continuous decrease, from year to year, of cases of syphilis, this result being in accordance with the data from the specialized literature.

Regarding the stage of the disease at the time of diagnosis, most patients are in the early latent or late latent lues stage, which shows the

discovery of the disease in routine serological tests, these stages being asymptomatic.

Particular attention should be paid to the figures for cases of congenital syphilis, which may be underestimated. The diagnosis of congenital syphilis is problematic, more than half of all children are asymptomatic, and the signs in symptomatic infants can be subtle and non-specific. [7]

Conclusions

Syphilis, a sexually transmitted infectious disease which in most cases, is the main venereal disease that humanity has faced. This disease represents the third most common sexually transmitted disease in Europe.

The study has shown a linear decrease in the incidence of syphilis in the last 3 years in the north-eastern region of Romania, but, nevertheless, it remains on the first places at European level. Further research is needed to understand the social situation and the determinants that lead to the spread of sexually transmitted diseases in Romania. [7]

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Conflict of interest
NONE DECLARED

Correspondance address: Ana-Maria Monu
Dermatovenerology Clinical Section, Emergency County Clinical Hospital "Saint Spiridon" Iași.