



## Brief report

# Syphilis epidemics: A descriptive study of patients diagnosed in a tertiary hospital between 2011 and 2015<sup>☆</sup>



Xavier Fustà<sup>a</sup>, Irene Fuertes<sup>a</sup>, Rossie Lugo-Colón<sup>b</sup>, José Luís Blanco<sup>c</sup>, Núria Baras<sup>d</sup>, Mercè Alsina-Gibert<sup>a,\*</sup>

<sup>a</sup> Servicio de Dermatología, Hospital Clínic de Barcelona, Universitat de Barcelona, Barcelona, Spain

<sup>b</sup> Centre d'Estudis Epidemiològics sobre les ITS i la Sida de Catalunya (CEEISCAT), Badalona, Spain

<sup>c</sup> Servicio de Enfermedades Infecciosas, Hospital Clínic de Barcelona, Universitat de Barcelona, Barcelona, Spain

<sup>d</sup> Universitat de Barcelona, Barcelona, Spain

## ARTICLE INFO

## Article history:

Received 17 December 2016

Accepted 27 April 2017

Available online 24 November 2017

## Keywords:

Syphilis

HIV

Sexually transmitted infections

Epidemiology

## ABSTRACT

**Background and objective:** In the last decade, the incidence of syphilis has increased in our health area. Our objective is to describe the epidemiological and clinical characteristics of patients diagnosed with syphilis at our centre and their relationship with HIV.

**Patients and methods:** The clinical and epidemiological variables of patients diagnosed with syphilis in a third-level hospital over a period of 4.5 years, as well as their HIV status, were analyzed through a descriptive study.

**Results:** There was a significant increase in the incidence of syphilis in the period 2011–2015. We included 220 patients, 98% men (94% MSM). 62% were HIV+ and 89% came in early/infectious stages of the disease. 7% were concomitantly diagnosed with HIV. There was a high number of sexual partners and frequent use of drugs associated with sexual activity (46%).

**Conclusions:** The incidence of syphilis has increased in our centre in the last 2 years. The most affected group is MSM, with high HIV prevalence and risk behaviours for STI acquisition.

© 2017 Elsevier España, S.L.U. All rights reserved.

## Emergencia de la sífilis: Estudio descriptivo de pacientes diagnosticados de sífilis en un hospital de tercer nivel entre 2011 y 2015

## RESUMEN

**Fundamento y objetivo:** En la última década la incidencia de sífilis se ha incrementado en nuestra área sanitaria. Nuestro objetivo es describir las características epidemiológicas y clínicas de los pacientes diagnosticados de sífilis en nuestro centro y su relación con el VIH.

**Pacientes y métodos:** Se analizaron, mediante estudio descriptivo, las variables clínicas y epidemiológicas de los pacientes diagnosticados de sífilis en un hospital de tercer nivel en un período de 4,5 años, así como su estatus respecto al VIH.

**Resultados:** Se observó un importante aumento en la incidencia de sífilis en el período 2011–2015. Se incluyeron 220 pacientes, el 98% hombres (el 94% HSH). El 62% eran VIH+. El 89% acudieron en etapas tempranas/infecciosas de la enfermedad. El 7% fueron diagnosticados de VIH de forma concomitante. Se observó un elevado número de parejas sexuales y frecuente consumo de drogas asociadas al ámbito sexual (el 46%).

## Palabras clave:

Sífilis

VIH

Infecciones de transmisión sexual

Epidemiología

<sup>☆</sup> Please cite this article as: Fustà X, Fuertes I, Lugo-Colón R, Blanco JL, Baras N, Alsina-Gibert M. Emergencia de la sífilis: Estudio descriptivo de pacientes diagnosticados de sífilis en un hospital de tercer nivel entre 2011 y 2015. Med Clin (Barc). 2017;149:536–539.

\* Corresponding author.

E-mail address: [MALSINA@clinic.ub.es](mailto:MALSINA@clinic.ub.es) (M. Alsina-Gibert).

**Conclusiones:** La incidencia de sífilis se ha incrementado en nuestro centro en los últimos 2 años. El colectivo más afectado es el de los HSH, con gran prevalencia de VIH y con conductas de riesgo para la adquisición de ITS.

© 2017 Elsevier España, S.L.U. Todos los derechos reservados.

## Introduction

In the early 1990s, the incidence of sexually transmitted infections (STIs) decreased due to the changes in the sexual habits of populations at risk of HIV infection.<sup>1,2</sup> The use of highly active antiretroviral therapy (HAART) has reduced the morbidity and mortality of this infection in Western countries until being currently deemed a chronic disease. Along with this reduction, there has been an increased occurrence of STIs, especially in the group of men who have sex with men (MSM).<sup>1,3</sup>

In Spain, syphilis is an individualized notifiable disease since 2007. The current increase in HIV prevalence may be due to a loss of fear to HIV transmission, a rise in sexual risk behaviours, such as inconsistent use of condoms, high number of sexual partners, consumption of alcohol and drugs during sex, prostitution and misconceptions about the safety of some sexual practices.<sup>3,4</sup> This paper is aimed at describing the epidemiological and clinical characteristics of patients diagnosed with syphilis at our centre and their connection to HIV infection.

## Patients and methodology

This is a descriptive study including all the patients diagnosed with syphilis in the STI consultation room of a tertiary hospital from January 2011 to June 2015. The data collected were: (a) sex, age, origin, reason for consultation, HIV status; (b) year of diagnosis with syphilis, STIs in the 12 months prior to diagnosis, concomitant STIs at the time of syphilis diagnosis, treatment, clinical and serological recovery confirmation; (c) sexual orientation, number of sexual partners in the 3 months prior to diagnosis, consumption and type of drugs during sex, client or prostitution practice; (d) in the HIV+ group: CD4+ count (cell/mm<sup>3</sup>), viral load (copies/ml), HAART and adherence to it.

The epidemiological data were obtained through an open interview and a standardized questionnaire authorized by the Ethical Committee for Clinical Research. Clinical data were obtained from computerized medical records. The diagnosis of *Treponema pallidum* was obtained through PCR assay and serological tests from cutaneous ulcers (VDRL, IgG and IgM) in patients with skin rash or contact study.

We conducted a descriptive study of the included variables. Means were calculated and ratios were compared by Pearson's  $\chi^2$  test and Fisher's exact test, setting 95% confidence intervals.  $p < 0.05$  was deemed significant. The obtained data were analyzed with the statistical software SPSS® 17.0.

## Results

220 patients were included, 98% were men, predominantly MSM (94%), 86.4% being exclusively homosexuals. The prevalence of HIV was 62%, being 66.8% in the group exclusively homosexual (Table 1).

The mean age was 37 years (SD: 9.6), being 8%  $\leq 25$  years old. The number of native patients was similar to the number of foreigners (51 and 49%, respectively). The most frequent source was Latin America (64%) and Western Europe (26%).<sup>4</sup>

The most frequent reasons for consultation were anogenital and/or oral ulcers (46%), followed by the study of contacts (28%) and exanthema (21%). Eighty-nine percent visited the doctor in

early/infectious stages of the disease (45% secondary, 30% primary syphilis, 14% early latent).

An increased incidence of syphilis was observed throughout the study period, with a higher increase in the last 2 years of the study, with HIV prevalence being significantly higher compared to previous years (Table 2). 33.2% of patients reported one or more STIs in the last year, with HIV prevalence being significantly higher in these patients. Syphilis was the most frequently reported previous STI (18% of the total). 18% of the patients were diagnosed concomitantly with another STI, mainly HIV not previously known (7%). Patients were treated with intramuscular benzathine penicillin G (199), oral doxycycline (14), intravenous sodium penicillin (1) or other regimens (6). Clinical and serological recovery was reported in 75% of the cases. 17% did not undergo control.

The mean number of sexual partners in the 3 months prior to diagnosis was 6.3 (SD: 11.3) (Table 1). Twenty percent reported  $>6$  sexual partners in this time period. HIV prevalence was higher in the group with the highest number of sexual partners, but these differences were not statistically significant. 46.4% of the patients reported alcohol and/or drug use during sex, with alcohol (44.1%) and cocaine (49%) being the most frequently reported. 86.1% of designer drug users were HIV+ ( $p = 0.002$ ). Prostitution was not proven to be a significant risk factor.

HIV+ patients had a mean CD4 count of 628.9 cell/mm<sup>3</sup>, with undetectable viral load ( $<37$  copies/ml) in 73.5% of them (Table 3). 87% were on HAART, with 96% adherence to therapy. The remaining 13% was not on HAART despite knowing their seropositivity at the time of acquiring syphilis.

## Discussion

The incidence of syphilis has increased progressively in our centre, with a higher rate in the last 2 years, mainly in young adult males, MSMs. These results are similar to those previously reported,<sup>3,5</sup> although in our study we observed a higher number of MSMs, probably due to the higher presence of this group in our consultation rooms. Patients reported a high number of sexual partners and alcohol and drug use during sex, indicating that STIs occur in a promiscuous population and with high-risk sexual relations.<sup>3</sup> In this group, in addition, we should note the high prevalence of HIV, being even higher in our study than in previous works.<sup>6,7</sup> These findings highlight the need to address the sexual partners in the HIV+ MSM group diagnosed with syphilis.

The fact that the most frequently reported STI was syphilis, shows the loss of fear of acquiring this disease. In addition, we found that the number of HIV cases diagnosed concomitantly with syphilis (7% in our study, which represents the most frequent concomitant diagnosis) is significant, highlighting the need to screen for HIV all patients diagnosed with syphilis or other STIs.<sup>4</sup>

Among HIV+ patients diagnosed with syphilis, we observed a prevailing patient profile: MSMs, with good immune control, undetectable viral load and good adherence to antiretroviral therapy. However, despite the fact that patients are aware of their seropositivity, they continue to be exposed to high-risk behaviours for acquiring STIs. This is particularly relevant if we consider that a high number of them continue to present detectable viral loads (26% in our study) and most of them are diagnosed with early syphilis.<sup>3</sup> It is well known that uncontrolled HIV infection is a risk factor for the spread of other STIs and that, in turn, ulcerative infections such

Download English Version:

<https://daneshyari.com/en/article/8763018>

Download Persian Version:

<https://daneshyari.com/article/8763018>

[Daneshyari.com](https://daneshyari.com)