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Early Syphilis and Syphilitic Hepatitis Following Unprotected Insertive Oral Sexual Intercourse: Case Report

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SUMMARY We present a case of early syphilis in a HIV negative bisexual man after an oral insertive intercourse with clinical overlap of primary and secondary stages, and laboratory and other criteria for syphilitic hepatitis. Moreover, we herein stress the importance of awareness of the high-risk behaviors and report syphilitic hepatitis without jaundice, a usually unrecognized clinical condition, emphasizing the clinical and therapeutic importance of its occurrence among syphilitic cases.

KEY WORDS: syphilis, syphilitic hepatitis, oral sex

A 54-year-old bisexual man presented to City Institute for Skin and Venereal Diseases complaining of multiple painless indurated penile and prepuce ulcers that had appeared two days before (Fig. 1). Examination revealed non-tender bilateral regional lymphadenopathy with no other skin or mucous lesions. Blood testing and syphilis serology were performed. Dark-field microscopy of primary lesions was technically limited. The patient claimed that during the last 3 months, the only sexual intercourse had been an episode of insertive oral sex with an unknown male, seven weeks before the onset of genital lesions.

Two days later, the patient came back for sudden onset of maculopapular rash on the trunk, accompanied by general symptoms of fatigue, malaise, fever and excessive sweating.

Laboratory tests revealed high erythrocyte sedimentation rate (ESR 60), leukocytosis, alkaline phosphatase 211 U/L (normal range, 53 to 128), alanine aminotransferase 158 U/L (normal range, 10 to 35), and aspartate aminotransferase 72 U/L (normal range, 14 to 50). Tests for hepatitis B surface antibody and surface antigen, hepatitis C antibody and HIV were all negative. Serologic results revealed positive non-treponemal reaction, i.e. Venereal Disease Research Laboratory (VDRL) test titer was 1:64, with specific Treponema Pallidum Hemagglutination Assay (TPHA) being positive as well. Abdominal ultrasound was unrevealing for hepatobiliary pathology.

The patient was treated with a single dose of benzathine penicillin G, 2.4 million units intramuscularly. Two weeks later, all skin lesions resolved.

The patient was retested 3 months later for syphilis serology, HIV and liver enzymes. The VDRL test titer was 1:8, HIV test remained negative, and elevation of liver enzyme levels resolved.

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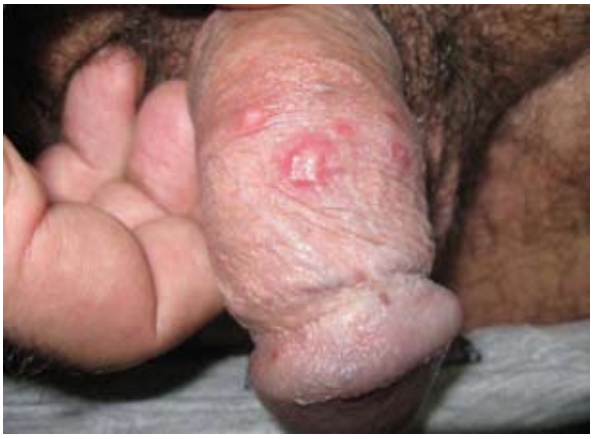

Figure 1. Multiple penile indurated chancres at first admission.

DISCUSSION

Atypical presentation of primary syphilis could be seen in up to 60% of cases; however multiple chancres and overlap of syphilis stages have been usually described with HIV co-infection (1,2). During the secondary stage the chancre is usually healed, still in 15% of cases it remains present (3).

The time from inoculation with *Treponema (T.) pallidum* to the presentation of primary syphilis with a chancre is typically 10 to 90 days, but from inoculation to the manifestation of secondary syphilis it takes 60 to 180 days (1). In our patient, the lesions of primary and secondary syphilis occurred concomitantly, although he was HIV negative. Overlapping stages of syphilis have been clinically documented in early literature (4).

Syphilitic hepatitis is a rare complication of primary and secondary syphilis with reversible cause of liver dysfunction (5). The evidence supporting the case of syphilitic hepatitis in our patient relied on the abnormal liver enzyme levels, serologic evidence of syphilis, followed by exclusion of alternative causes of hepatic damage (acute viral hepatitis or use of medications or current alcohol abuse) and improvement of liver enzyme levels following antimicrobial therapy. Noto *et al*. have recently reported a similar case of syphilitic hepatitis in a bisexual immunocompetent male, and reasonable doubt has been raised that syphilitic hepatitis might be under-recognized (6). On the other hand, in their study Mullick *et al*. for the first time describe seven cases of syphilitic hepatitis in HIV-infected patients (7).

The increasing popularity of oral sex as a safer sex practice in HIV era has introduced this type of sexual intercourse as a replacement for higher risk behaviors, especially when considering men having sex with men (MSM) (8). Having this in mind, our patient was surprised with the fact that he had acquired syphilis through oral insertive intercourse as part of his usual sexual behavior; moreover, he was convinced that he was involved in safe sexual practice.

One third of MSM who were involved in syphilis outbreaks in Brighton and Manchester, United Kingdom, acquired syphilis through oral sex (9). Literature data show that the reported rates of unprotected oral sex remain high across all demographic categories, both in heterosexual (10) and homosexual (11) men.

CONCLUSION

In conclusion, our case presentation supports the need for education of sexually active persons about causative relationship between unprotected oral sex and various sexually transmitted infections including syphilis and HIV, and to remind physicians of diverse and emerging clinical features of syphilis, 'the great imitator', since the early diagnosis is essential for effective treatment.

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