

## Uma Forma Rara de Balanite

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**RESUMO** – Apesar de ser uma doença antiga, a Sífilis continua uma preocupação muito atual em Saúde Pública e o seu número de casos continua a aumentar. As apresentações atípicas desta infeção podem ser verdadeiros desafios diagnósticos.

Relatamos o caso de um homem VIH-positivo de 23 anos de idade, HSH, observado por uma lesão assintomática na glândula com duas semanas de evolução. Vários tratamentos tópicos e sistémicos foram tentados previamente, sem benefício. O exame objetivo demonstrou uma placa eritematosa, mal delimitada, endurecida, de superfície lisa que ocupava a maior parte da glândula. Adenomegalias indolores bilaterais eram palpáveis. Os testes serológicos demonstraram uma subida de 4x o título do VDRL (1:8, previamente 1:2). Foi realizado o diagnóstico de balanite sífilítica de Follmann. A resolução completa da lesão foi conseguida com uma dose única intramuscular de penicilina benzatínica de 2,4 M.U.

A balanite sífilítica de Follmann é uma manifestação pouco comum de sífilis primária, havendo menos de 100 casos relatados. Apesar das lesões clínicas evoluírem para a resolução espontânea mesmo sem tratamento adequado, o doente permanecerá altamente infeccioso e em risco de morbilidade futura. Numa era em que o número de casos de sífilis têm aumentado rapidamente na Europa Ocidental e Estados Unidos, recomenda-se que se conheçam as manifestações clássicas e atípicas de sífilis precoce, já que estas representam oportunidades únicas para tratamento e prevenção de transmissão futura de doença pelo indivíduo infetado.

**PALAVRAS-CHAVE** – Balanite; Sífilis; Sífilis Cutânea.

## A Rare Type of Balanitis

**ABSTRACT** – Syphilis is an old disease and a major public health concern, which is re-emerging in the western world. Atypical syphilitic presentations can be challenging to diagnose. We present a 23-year-old, HIV-positive man who has sex with men who presented with a 2-week history of an asymptomatic lesion on the glans. Previous topical and systemic treatments proved unsuccessful. Physical examination demonstrated a slightly indurated, ill-defined erythematous plaque over most of the glans. Enlarged, non-tender, bilateral inguinal lymph nodes were palpable. Serological tests revealed a fourfold increase in the VDRL titre (1:8, previously 1:2). A diagnosis of syphilitic balanitis of Follmann was made and complete resolution was achieved with an intramuscular single dose of benzathine penicillin 2.4 MU.

Syphilitic balanitis of Follmann represents an uncommon manifestation of primary syphilis, with less than 100 cases reported. Untreated, it will resolve spontaneously, but the patient will remain highly infectious and at-risk for long-term morbidity. In an era in which the number of syphilis cases is increasing sharply both in Western Europe and the United States, all physicians should be aware for the typical and atypical early syphilitic manifestations as they represent opportunities of paramount importance for treatment and epidemic control.

**KEYWORDS** – Balanitis; Syphilis; Syphilis, Cutaneous.

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## Caso Clínico

### INTRODUCTION

Syphilis is an ancient chronic bacterial infection caused by *Treponema pallidum*, subspecies *pallidum*. Its first outbreak was reported in Naples, Italy, during the French invasion led by King Charles the VIII. When the French troops returned home, they spread the incurable infection across Europe.<sup>1</sup> It was not until 1530 that the Girolamo Fracastoro, an Italian physician and poet, coined the term [{"id": "IT"} in his poem *Syphilis sive morbus gallicus*, about a shepherd boy named *Syphilus* who disrespected the Greek god Apollo and thus received a horrible affliction as punishment. Over the history, many treatments were attempted to cure the infection, including mercury, guaicaco, potassium iodine and arsphenamine, an arsenic compound also known as Salvarsan.<sup>3</sup> However, it was not until the introduction of penicillin in 1943 that the number of cases would decline considerably. Eradication was even thought to be possible by the end of the 20<sup>th</sup> century in the United States, and elimination plans by the Centers for Disease Control and Prevention (CDC) were even attempted.<sup>4</sup> Nevertheless, these efforts failed to hamper the disease transmission and the its incidence has increased dramatically during the past decade in the western world, especially in men who have sex with men (MSM) and within tight sexual and social networks.<sup>5</sup> Left untreated, patients are at-risk for long-term morbidity and increased risk of HIV infection.<sup>5</sup> Atypical syphilitic presentations can be challenging to diagnose.

### CASE REPORT

A 23-year-old, HIV-positive MSM, treated with abacavir/dolutegravir/lamivudine in a fixed-dose combination with excellent immunovirological control (CD4+ 828 mm<sup>3</sup> and

undetectable HIV viral load), presented to the Sexual Transmitted Infections (STIs) Clinic with a 2-week history of an asymptomatic lesion on the glans with no associated systemic symptoms. He had already been observed by two physicians, who attempted treatment with different combinations of topicals (betamethasone, clotrimazole) and systemic drugs (cefixime, azithromycin) without benefit. His medical history was also remarkable for secondary syphilis two years before (pre and post-treatment VDRL titres were 1:256 and 1:2, respectively). He recalled 4 partners in the last 6 months with whom he maintained unprotected sexual intercourse.

Physical examination showed a slightly indurated, ill-defined erythematous plaque over most of the glans (Fig.1). Enlarged, non-tender, bilateral inguinal lymph nodes were palpable. Polymerase chain reactions for *Chlamydia trachomatis*, *Neisseria gonorrhoea* and *Mycoplasma genitalium* were negative, but serological tests revealed a fourfold increase in VDRL titre (1:8, previously 1:2). A diagnosis of syphilitic balanitis of Follmann (SBF) was made. Successful treatment and complete clinical resolution were achieved with an intramuscular single dose of benzathine penicillin 2.4 MU. Patient was observed 3-months thereafter and he was asymptomatic and no new STIs have been diagnosed so far.

### DISCUSSION

SBF represents an uncommon manifestation of primary syphilis, with less than 100 cases reported.<sup>6</sup> Nevertheless, it is probably exceedingly underdiagnosed and overlooked, easily masquerading as an unspecific inflammation of the glans both for the patient and the physician. More important than its frequency, treating SBF represents a golden opportunity for epidemic control. Left untreated, SBF will



**Figure 1** - A Slightly indurated, ill-defined erythematous plaque over most of the glans.

spontaneously resolve in 3-6 weeks but the asymptomatic patient will remain highly infectious for its current and future sexual partners. Thus, any focal or diffusely indurated balanitis should prompt investigation for this syphilitic presentation.<sup>6,7</sup> Penile erosions and enlarged regional lymph nodes may also be present<sup>6,7</sup> and the former may require a HSV PCR test to rule out an herpetic infection. Differential diagnosis should also be made with other far more frequent causes of infectious balanitis or balanoposthitis, such as candidiasis balanoposthitis and *Chlamydia trachomatis* balanitis, or even dermatoses of inflammatory aetiology, such as Zoon balanitis, eczema or psoriasis, which can usually be ruled out based on the patient's medical and sexual history, combined with the clinical observation and mandatory serological tests.

In the current era of syphilis resurgence, especially among MSM where the infection is on unparalleled steep in Europe and United States, with no exception for Portugal, we would like to cite John H. Stokes (1885-1961), the renowned syphilologist who said of a (syphilitic) chancre may assume almost any conceivable morphological form". All physicians should remind themselves of this historical, yet still contemporary lesson.

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