

Syphilitic Elephantiasis of Penis and Scrotum

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Keywords: sexually transmitted diseases, syphilis, elephantiasis

Urol J. 2007;4:245-7.
www.uj.unrc.ir

INTRODUCTION

Syphilis is normally manifested 2 weeks after sexual exposure with the characteristic painless penile sore. The infection rapidly progresses to the secondary stage unless adequate treatment is administered. The secondary stage is characterized by the appearance of rashes in which the infection overwhelms the body. Systematic symptoms such as fever, swollen lymph nodes, sore throat, patchy hair loss, headache, weight loss, muscle ache, and fatigue may also appear.⁽¹⁾ If left untreated, secondary stage progresses to the tertiary stage.

Syphilis has often been called “the great imitator” because many of its signs and symptoms are indistinguishable from those of other diseases.⁽²⁾ Many people infected with syphilis do not have any symptoms for years. In addition, the long incubation period of the disease (between 10 and 90 days) makes the diagnostic process difficult. Although enlargement of inguinal lymph nodes is often detected, coexistent penoscrotal elephantiasis is rather rare.⁽³⁾ We present a man with penoscrotal

elephantiasis and mild enlargement of the inguinal lymph nodes.

CASE REPORT

A 15-year-old male Romanian immigrant presented with fever (38.5°C), acute penoscrotal edema, arthralgia, and malaise in the absence of symptoms and signs of lower urinary tract infection. Clinical examination revealed few brown spots in the inguinal folds. Elephantiasis of the scrotum was present with the smooth and soft overlying skin, while both testes were normal (Figure 1). The penis was solidified and twisted. Although there was no obvious inguinal lymphadenopathy,

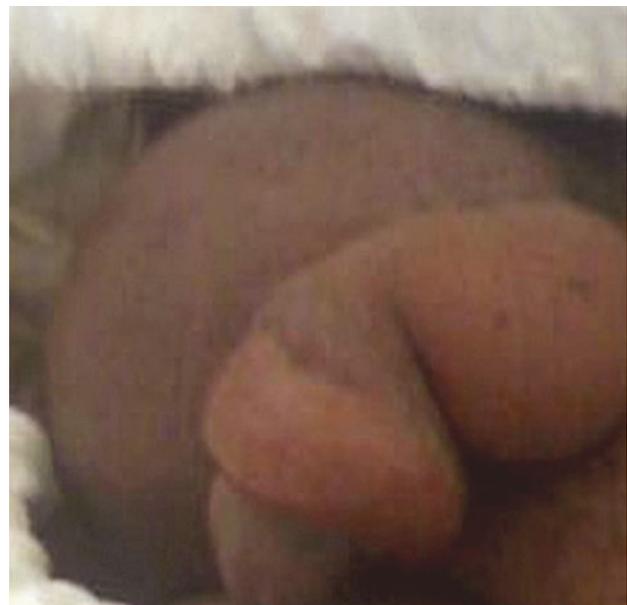


Figure 1. Penoscrotal elephantiasis is shown at the day of presentation.

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Received March 2007
Accepted August 2007

the inguinal lymph nodes were palpable and slightly painful. Digital rectal examination of the prostate was normal. Examination of the penis revealed a single genital ulcer. The patient reported an unprotected sexual contact 1 month earlier, but he denied any history of preceding urethritis. There was no history of bladder outlet obstruction and rectal discharge. Laboratory investigations revealed an elevation of white blood cell count ($14.5 \times 10^9/L$, granulocytes 81%) and a mild eosinophilia (4.8%). Other laboratory results were as follows: blood hemoglobin, 12.5 g/dL; hematocrit, 37.5%; and red blood cell count, $4.26 \times 10^9/L$. Total serum protein, albumin-globulin ratio, and blood glucose were also normal. Chest radiography and abdominal ultrasonography did not reveal any abnormality. The patient was seronegative for human immunodeficiency virus. The repeated midnight peripheral blood smears, after provocation by a 100-mg tablet of diethyl carbamazine, were negative for microfilariae. The venereal disease research laboratory and the fluorescent treponemal antibody absorption tests were both positive. Darkfield microscopic examination of chancre smear was performed in order to confirm the diagnosis of syphilis. After confirming the diagnosis, intramuscular benzathine penicillin G, 1 liter of intravenous fluid per day, paracetamol with the intramuscular dose of 1g, and oral serratiopeptidase were administered. All symptoms disappeared within 3 days (Figure 2).



Figure 2. Penoscrotal elephantiasis 3 days after treatment is shown.

DISCUSSION

Although it has been nearly a quarter of a century since the incidence of syphilis is dramatically reduced (accounting now for less than 2.5 per 100 000 people), syphilis still remains a diagnostic challenge.⁽⁴⁾ Of the three stages of the disease recognized, the primary stage of syphilis, marked by the appearance of a single or multiple chancres in the genital region can occur silently. Indeed, chancres are usually small and painless, and they heal without treatment.⁽⁵⁾ In contrast, the secondary stage is manifested with both systematic symptoms and development of the rashes.⁽¹⁾ The characteristic rash of secondary syphilis may appear as rough, red, or reddish brown spots.⁽⁶⁾ These rashes usually appear on the palmar or plantar regions as the chancre is healing. However, in many cases, the characteristic sores are unrecognized, while rashes appear several weeks after the chancre has healed. Rarely, rashes with a different appearance may occur on other parts of the body, independently to the presence of typical rashes of secondary syphilis. Sometimes rashes associated with secondary syphilis are so faint that they are not noticed and in some cases there are no rashes at all. On the other hand, systematic symptoms could be misdiagnosed in the absence of evident cutaneous lesions. Indeed, many of the signs and symptoms of syphilis are indistinguishable from those of other diseases.⁽²⁾

Penoscrotal elephantiasis is a very rare manifestation of syphilis, which probably appears as a result of the enlargement of the lymph nodes and lymphatic flow obstruction caused by the infection of the genitalia.⁽³⁾ Although the incidence of syphilis has been dramatically declined, physicians, especially younger ones, should be familiarized with this important sexually transmitted disease. In conclusion, syphilis should be considered in the differential diagnosis of the patients with systematic symptoms accompanied with penoscrotal elephantiasis and a painless genital ulcer.

CONFLICT OF INTEREST

None declared.

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