

## CASE REPORT: COBBLESTONE

# Bilateral groove sign with penoscrotal elephantiasis

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*Sex Transm Infect* 2002;**78**:458–458

Lymphogranuloma venereum (LGV) is a sexually transmitted disease of the lymph channels caused by *Chlamydia trachomatis*. Esthiomene, a rare late manifestation of LGV, is a primary infection affecting the lymphatics of scrotum, penis, or vulva. The male genitalia are affected less commonly by esthiomene, but we report a male patient who presented with inguinal syndrome, penoscrotal elephantiasis, along with enlargement of femoral lymph nodes.

Lymphogranuloma venereum (LGV) is a sexually transmitted disease of the lymph channels caused by *Chlamydia trachomatis*, characterised by a small fleeting primary lesion followed by the development of suppurative regional lymphadenitis.<sup>1</sup> Esthiomene, a rare late manifestation of LGV, is a primary infection affecting the lymphatics of scrotum, penis, or vulva and may cause chronic progressive lymphangitis, chronic oedema and sclerosing fibrosis of subcutaneous tissues,<sup>2</sup> which results in induration and enlargement of affected parts and ultimately in ulceration. The male genitalia are affected less commonly by esthiomene. We report a male patient who presented with inguinal syndrome, penoscrotal elephantiasis along with enlargement of femoral lymph nodes.

A 40 year old male patient, married, presented with swellings bilaterally in the inguinal and femoral region, after 1 month of unprotected extramarital sexual contact. The swellings were firm in consistency, slightly painful, and enlarged with the passage of time. The onset of swellings was accompanied by fever, arthralgia, and malaise. About 1½ months later, the patient developed firm swellings of the penis and scrotum along with thickening of the overlying skin. He denied any history of preceding genital ulceration or urethritis. There was no history of difficulty in defaecation, rectal discharge, or constipation.

On examination, oval, lobulated swellings were present in the inguinal folds and in the femoral region, bilaterally (fig 1). The lesions were adherent to overlying skin and fixed to the subjacent tissues with the overlying skin showing thickening and a cyanotic hue. The surface was smooth and consistency soft. The enlarged inguinal and femoral lymph nodes, on both sides, were separated by a depression.

Elephantiasis of penis and scrotum was present with the overlying skin showing a violaceous hue, thickening and rugosity. The penis was solidified and twisted giving rise to the so called "saxophone penis." A diagnosis of LGV inguinal syndrome along with penoscrotal elephantiasis was made. Per rectal examination was normal.

On investigations, haemoglobin level, total and differential leucocyte counts, total serum protein, albumin/globulin ratio, blood sugar and Mantoux test, chest x ray and ultrasound of the abdomen did not reveal any abnormality. The patient was seronegative for HIV-I and II. The repeated midnight peripheral blood smears for microfilariae, after provocation by a 100 mg tablet of diethylcarbamazine, were negative. The complement fixation test and microimmunofluorescence test for LGV could not be done because of non-availability.

Inguinal adenopathy in LGV is usually unilateral but may be bilateral in up to one third of cases.<sup>3</sup> The femoral lymph nodes



**Figure 1** Bilateral groove sign with penoscrotal elephantiasis.

are also affected in about 20% of cases and when these and inguinal lymph nodes are enlarged, they are separated by Poupart's ligament, producing a groove, known as the "groove sign of Greenblatt," that is said to be pathognomonic of LGV.<sup>4</sup> Late complications of the male inguinal syndrome are rare.<sup>5</sup> Elephantiasis of the penis and scrotum characterised by infiltrative, ulcerative, and fistular lesions occurs in approximately 4% of cases.<sup>6</sup>

This patient is being reported because of presence of a bilateral "groove sign" and penoscrotal elephantiasis, which in themselves are rare manifestations of LGV.

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Accepted for publication 5 July 2002

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