Amoebic ulcer of the penis

SATYA PARKASH
F.R.C.S. (Eng.), M.A.M.S.

K. RAMAKRISHNAN
M.S.

N. ANANTHAKRISHNAN
M.S., M.A.M.S.

MARGARET TOPNO
M.B.B.S.

A. L. AURORA*
M.D.

*Departments of Surgery and *Pathology, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry 605 006, India*

Summary

This is a report of a rare entity—an amoebic ulcer of the penis. The gross loss of glans and terminal urethra was repaired by a new technique using an island based anterolateral dartos flap.

Introduction

A rare and virtually unrecognized ectopic site of amoebic infection is the genitalia in both sexes (Faust, Russell and Jung, 1970). The lesion should be borne in mind in the differential diagnosis of ulcers of the penis, both benign and malignant.

Case report

A 50-year-old male presented with 10 day history of a painful swelling of the prepuce, with a foul smelling, bloodstained subpreputial discharge. The prepuce was not retractile. A dorsal slit was made and a tissue biopsy was taken as a neoplasm was suspected. Within a week it was found that the whole prepuce had been destroyed by an ulcer, which had eaten away the ventral $\frac{3}{4}$ of the glans and the skin of the distal $\frac{1}{3}$ of the shaft (Fig. 1). The entire penis was oedematous. No significant regional lymphadenopathy was noticed. Histologically the lesion was an amoebic granuloma with plenty of trophozoites (Fig. 2).

The patient did not give any history suggestive of an amoebic infection—alimentary or extra-alimentary, or of extramarital contact. He had been leading an active sexual life. Following the biopsy report, the subject's spouse was examined and was found to have a granulomatous lesion of the cervix which was asymptomatic. There was no vaginal discharge. Histopathological examination of this lesion also revealed multiple trophozoites of *Entamoeba histo-*

FIG. 1. Penile ulcer eroding glans and extending along the shaft.

lytica, with no evidence of underlying malignancy. Amoebae were not isolated or grown from the stool specimens of the couple or from smears of the granulomas.

Antiamoebic treatment was given for 2 weeks on

which the slough and discharge disappeared and the ulcer regressed. The surviving glans was resting as a peninsula, with less than 1 cm of an isthmus dorsally. The urethra had lost 1 cm of its ventral part and thus there was a large coronal hypospadias (Fig. 3).

FIG. 2. Section shows many amoebae (arrowed) with surrounding area of cytolysis and acute inflammatory cells. (HE, $\times 400$).

The defect was reconstructed by an anterolateral dartos based scrotal flap, which was tunnelled as a one stage procedure, supplemented with skin removed in de-epidermizing the buried part of the flap (Fig. 4).

Discussion

Amoebic involvement of the penis forms a negligible fraction of penile ulcers, and of cutaneous amoebiasis. The mode of infection is by direct inoculation by vaginal or anal intercourse, with a person suffering from amoebic dysentery (Biagi and Martuocheili, 1963). As the couple in question were not cyst carriers or harbourers of active intestinal infection, the exact mode of spread is not clear and perhaps the infection was obtained from a third party through the means suggested above. Neither of the patients on examination had evidence of invasive rectal amoebiasis.

FIG. 3. Raw area following response to antiamoebic treatment. Note the coronal hypospadias.

FIG. 4. Dartos based scrotal flap in position closing the raw area.

Amoebic ulcers are serpiginous with distinct, raised thickened, often undermined edges, with an erythematous rim, haemopurulent exudate and necrotic slough. Pain is intense; regional adenitis is usual (Cooke and Rodrigue, 1964). Associated cutaneous lesions resembling urticaria, acne and eczema are also described (Rook, Wilkinson and Ebling, 1979). These were not observed in our patient. Other sites of cutaneous amoebiasis are the perianal region, incision and drainage sites of abdominal abscesses, legs, buttocks, face and vulva particularly in infants with amoebic dysentery (Rook *et al.*, 1979).

The diagnosis is clinched by the demonstration of motile trophozoites in smears of the discharge or by histological examination which reveals trophozoites, cysts and granulomatous reaction as in the present case. Serological tests may be positive.

The treatment is a combination of antiamoebic drugs and antibiotics. The special cosmetic, psychological and functional problem posed by the massive destruction of the penis in our patient, necessitated the use of a dartos based scrotal flap for reconstruction.

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