Buschke-Löwenstein's tumour presenting with urinary fistula

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SUMMARY A case of Buschke-Löwenstein's tumour presenting with urinary fistula is described. The large lesion in the subpreputial sac occluded the preputial opening and infiltrated beneath the skin of the shaft of the penis resulting in a fungating growth encasing the fistulous tract. The lesion responded well to 25% podophyllin, which is reportedly unusual.

Introduction

The Buschke-Löwenstein tumour represents a giant condyloma acuminatum lesion that is clinically aggressive but histologically benign. The clinical resemblance to epidermoid carcinoma is striking, and conversely a true carcinoma has at times been mistaken for condyloma on inadequate histopathological examination (Oranje *et al.*, 1976). The lesion generally presents on the penis, although the anorectum, perineum, and rarely the oral mucosa, abdominal wall, or the thigh may be involved (Knoblich and Failing, 1967; Oriel, 1971; Powell, 1972; Bedi *et al.*, 1975). On the penis, the lesion arising from the coronal sulcus invariably grows outwards forming a vegetating tumour displacing or destroying the prepuce. Rarely, obstructive symptoms may result from compression of the deeper tissues of the penis. A case was recently seen with a giant lesion occupying the subpreputial sac, occluding the preputial opening and infiltrating upwards beneath the skin of the dorsum of the penis with resultant urinary fistula.

Patient

A 19-year-old unmarried Hindu boy presented with a foul smelling warty growth on the shaft of the penis and phimosis of three months' duration. He had intense burning while micturating and he could void urine only through the lesion on the dorsum

of the penis. He had had a sexual exposure five months previously; he remained asymptomatic for two months when he noticed a small growth in the coronal sulcus. The lesion rapidly increased to occupy the subpreputial sac so that the foreskin could not be retracted. Soon after, he noticed another lesion on the dorsum of the penis which fungated on the surface producing a putrid odour and he started voiding urine through this lesion.

Examination revealed an uncircumcised individual with foul smelling verrucous growths on the dorsum of the penis and the prepuce (Figs 1, 2, and 3). The foreskin could not be retracted and the

Fig. 1 Verrucous lesion on the shaft of the penis.

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Fig. 2 Verrucous lesion occluding the preputial opening.

opening was completely obliterated. There were no lesions elsewhere on the body. Bilateral inguinal lymphadenopathy was present.

The blood Venereal Disease Reference Laboratory (VDRL) test was negative. The voided urine sample contained numerous pus cells and erythrocytes. A smear from the lesion showed Gram-positive cocci. With a clinical diagnosis of Buschke-Löwenstein

Fig. 3 The extent of the tumour and fistulous tract.

tumour and a suspicion of carcinoma possibly because of concomitant urinary fistula (although the age of the patient suggested the former diagnosis), the lesion on the dorsum of the penis was biopsied.

The histological examination revealed marked pseudoepitheliomatous hyperplasia with an underlying dense inflammatory infiltrate composed of lymphocytes, plasma cells, and a few eosinophils and polymorphs. The spongiotic epidermis showed a number of mitotic figures in the basal layer but there was no evidence of carcinoma.

Treatment

Podophyllin (25%) in compound benzoin tincture was applied topically on the preputial lesion every third day. After six applications the lesion had almost completely dissolved and the prepuce had become retractable (Fig. 4). On retraction, the

Fig. 4 Post-treatment with 25% podophyllin. The prepuce has been retracted.

coronal growth was seen to extend and communicate through an opening to the fungating lesion on the shaft of the penis. The urethral meatus was free of lesions and the patient could pass urine normally. The lesion on the shaft was then treated in a similar manner; it also showed complete regression after two weeks of treatment. The patient was re-examined after three months and there was no recurrence.

Discussion

The clinically aggressive nature of the tumour is reflected by its rapidly proliferating growth resulting in local tissue destruction. Indeed, deeper infiltration, destruction and fistula formation, but for the young age of the patient, prompts one to suspect a malignant process and that an urgent histopatho-

logical examination will be needed. The lesion is generally found to be benign, although malignant transformations are known to occur (Machacek and Weakley, 1960; Siegel, 1962). In elderly patients, a number of biopsies may have to be taken to determine the true nature of the lesion (Oranje *et al.*, 1976).

Podophyllin, although a useful topical remedy for ordinary condyloma acuminata, has repeatedly proved valueless for treating Buschke-Löwenstein's tumour (Machacek and Weakley, 1960; Dawson *et al.*, 1965; Knoblich and Failing, 1967; MacCarron and Carlton, 1970; Netto *et al.*, 1976). Such lesions, instead, are often subjected to electrocoagulation or surgical excision. In this patient, the lesion responded satisfactory to topical applications of 25% podophyllin. The drug therefore deserves a trial in large lesions before surgical intervention. However, because of its known systemic toxicity, it should be avoided in cases of extensive genital lesions especially in pregnant women (Chamberlain *et al.*, 1972).

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