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RECONSTRUCTION OF PENILE SKIN DEFECT BY CUTANEOUS FLAP FROM THE INNER ASPECT OF THE THIGH

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ABSTRACT

Two patients with penile skin loss who were operated in 1991 are reviewed retrospectively. In both of them skin grafting was mandatory (due to large skin defects on the penile shaft). Causative factors were localized infection in one case and verrucae accuminata in another.

In both cases a random flap from the skin of the inner surface of the thigh was applied. The pedicle flap was later transected.

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INTRODUCTION

Reconstruction of penile skin defects is by split-thickness skin grafting. Nearly all authors suggest this form of management for large or circumferential penile defects after burns, avulsion injuries, resection of tumors or necrotizing infections.

Fortunately the urethra is usually intact. Infected penile wounds, regardless of mechanism, always need to be treated primarily with local care and debridement. A definitive procedure should be done only after the infection has cleared. Skin grafts may undergo contraction but usually provide good functional coverage and cosmetic results.

Skin grafts can be applied for the penis if the patient is impotent and erection is not expected.

PATIENTS AND METHODS

Two patients with penile skin loss were admitted to the surgical ward. In one of them the causative agent was necrotizing infection of the penis, scrotum, lower abdomen and perineum (Fig. 1). After the infection cleared, nearly the whole shaft of the penis was bare and devoid of skin. In order to repair the defect we decided to use a local random rotation cutaneous flap from the inner aspect of the right thigh, roll it around the penis and suture it (Fig. 2). The donor site was closed primarily with advancement flaps. After 21 days the pedicle was transected. The flap took well.

In the second case there was extensive verrucae accuminata of the penis. After resection of the lesion, the defect was treated with a skin graft which failed later on. In the second attempt for reconstruction, the previous procedure was performed. The result was excellent. The patient recovered afterwards (Fig. 3).

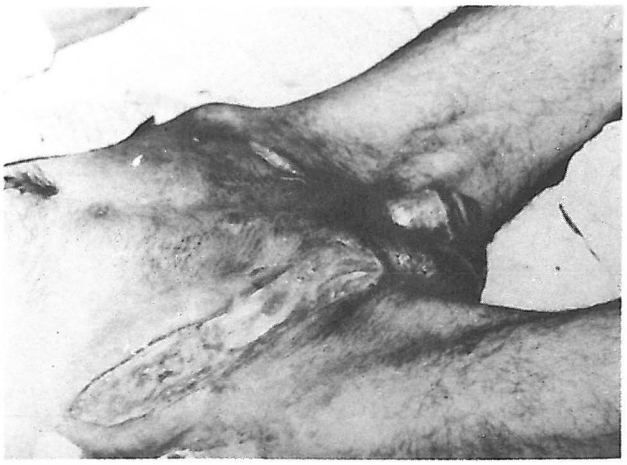

Fig. 1. Extensive infection of lower abdomen and perineum.

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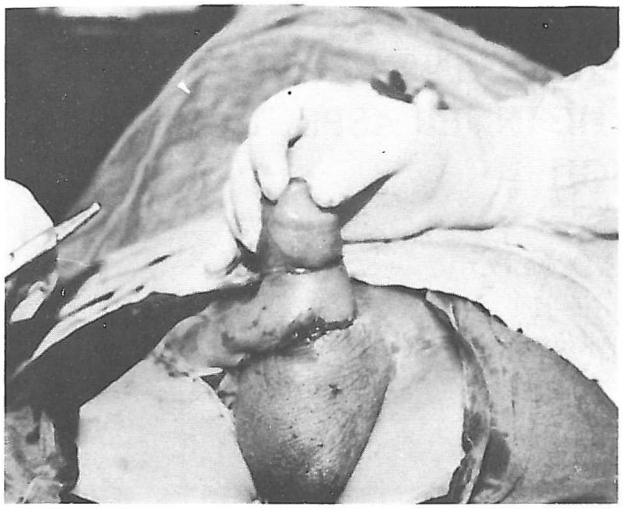

Fig. 2. Penile cutaneous flap two days after operation.

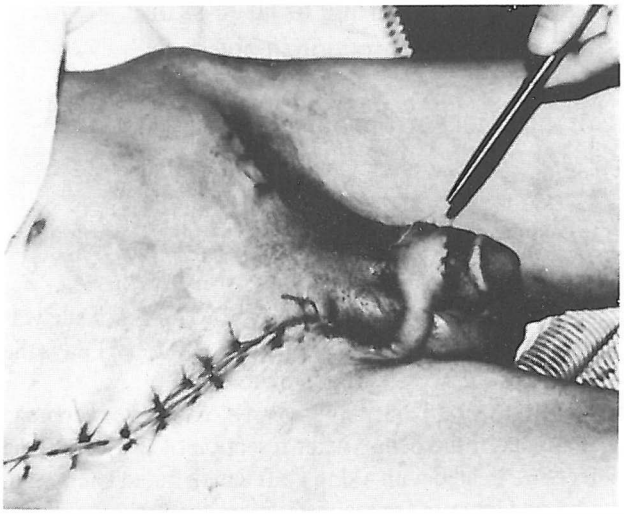

Fig. 3. Penile cutaneous flap at the time of operation.

RESULTS

Penile reconstruction via cutaneous flap culminated in satisfactory outcomes in both cases. There were no complications whatsoever.

DISCUSSION

Generally the graft "take" requires 96 hours. Patients are placed on strict bed rest for five days to diminish the chance of graft motion on the recipient area.

The bolster dressing is left in place for five to seven days. The patient's activities are severely limited for four to six weeks after grafting, by which time the graft is well established and can withstand the trauma of sedate activities. Patients are advised to refrain from intercourse for eight to ten weeks.

Flap reconstruction has numerous advantages; there is no need for special dressings, the probability of failure is slight and contraction of a flap compared to a skin graft is less.

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