

## A Curious Keloid of the Penis

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Sir,

Keloids of the genitalia and penis are rare despite frequent surgery in this area. A careful review of the literature revealed only a few cases reported since Browne's statement in 1949 that the skin of the penis "never forms a keloid" (1), and Crockett's research attempting to classify the susceptibility of different areas of the body to keloid formation and not finding any cases affecting genitalia in a survey of 250 Sudanese natives (2). The aim of this report is to document a case that has resulted from such a common treatment as diathermy for genital warts.

### CASE REPORT

A 32-year-old Negro man was referred to our department in February 2002 because of a firm nodule at the base of the shaft. One year previously he had undergone electrocauterization for condylomata acuminata at the proximal third of the dorsum of the penis next to the fold between it and the pubis. After having healed completely the scar started to elevate and became hypertrophic and prominent. Over a period of about 9 months following the surgical injury a slowly progressive growth forming a nodular mass 2.5 cm in diameter could be seen at consultation. Physical examination revealed a crescent-shaped firm nodule, covered by smooth and intact skin without any other sign of inflammation (Fig. 1). The patient complained of embarrassment and tenderness, but no pain. There was no family history of either keloid or hypertrophic scarring; he had no keloids in other scars and even after the circumcision there had been no complications.

A complete surgical excision of the nodule was



Fig. 1. A crescent-shaped keloid on the dorsum of the penis.

performed and the histopathological analysis of the specimen revealed irregular and thick collagen bundles characteristic of keloid. There was no evidence of granuloma in tissue sections to suggest a possible infectious cause. The scar was treated for the next 3 months with topical use of fluocinolone acetonide gel twice a day. A 12-month follow-up showed that the wound healed perfectly, leaving a small elevated, firm scar but without itching, redness or any other sign of keloid recurrence. In the last 6 months there was no appreciable change in the lesion.

### DISCUSSION

We report what we believe is the tenth documented case of keloid of the penis. Six of those reported cases were complications of circumcision either with massive or mild lesions. In the other cases keloid formation occurred after traumatic injuries and surgical treatments (4–12). Notwithstanding the fact that about one-sixth of the world male population practices circumcision and that abnormal scarring must be a potential complication of such a common procedure, keloids of the penis and genitalia are surprisingly rare (9). Furthermore, female circumcision is still widely practised in many African countries but nothing has been reported in the literature concerning keloids in female genitalia after such a procedure (13, 14).

We do not know the true incidence of keloids after the traditional surgical treatments for sexually transmitted diseases. Friedman & Gal (15) reported four cases of severe keloid scars after CO<sub>2</sub> laser treatment for molluscum contagiosum. Although this mode of therapy has often been advocated as a safer alternative, removal by either continuous or intermittent CO<sub>2</sub> laser was followed by the same result. In addition, they stated that in the same patient areas affected by genital warts treated with CO<sub>2</sub> laser did not develop keloid scars (15).

According to Parsons (3) there is no obvious clinical reason why penile skin and genitalia should have a different susceptibility to formation of this tumour. The hypothesis of decreased skin tension may contribute to the rarity of keloids in this site. On the other hand, although keloids are likely to occur mainly where the melanocyte concentration is greatest, on genitalia they are exceedingly rare (14). Nevertheless, the embarrassment of disclosing a disfiguring lesion on the genitalia does not contribute to solving this enigma.

The aim of this report was to record the case we considered as a possible complication of such a common treatment as diathermy for genital warts. Surgical excision by cold knife was not followed by any recurrence in our case, nor in most cases reported. It seems to be the treatment of choice (9). Local pressure or irradiation (16) is considered inappropriate in this anatomical area. Local

steroid injection is often effective in treating keloids, although those cases treated with intradermal triamcinolone did not achieve the expected results, and the risk of local fat and skin atrophy was significant (6).

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