Keloid of the penis after circumcision

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Summary: We report what we believe is the first documented case of keloid formation on the penis following circumcision.

Introduction

Keloid formation is a well-recognized complication of both surgical and traumatic skin wounds. However, this has not, as far as we know, been reported after the common procedure of circumcision, even in those otherwise predisposed to keloid.

Case report

A 10 year old coloured boy from Sierra Leone underwent a routine circumcision for cultural reasons. The procedure was uneventful and there were no early complications; however, he presented 2 years later with pronounced keloid formation around the base of the glans (Figure 1). He complained of embarrassment and pruritis. He had a previous keloid following a traumatic wound to his axilla but there was no family history of keloid formation.
The penile keloid was treated by serial injections of intradermal triamcinolone under general anaesthetic. After four injections there was an appreciable reduction in both the size of the lesion and the itching.

Discussion

Keloid of the genitalia is exceedingly rare. It is intriguing that keloid has never been observed after the common procedure of circumcision. Denis Brown1 stated that the skin of the penis 'never forms keloid' and Crockett2 found no example in a review of 250 Sudanese natives. In fact, two cases of penile keloid do exist in the literature. One case3 developed after surgical removal of a traumatic cyst on the shaft in an eight-year old Negro boy who, incidentally, had previously been circumcized without this complication. The second case4 followed a major laceration and subsequent burn to the shaft and scrotum of a 44 year old Caucasian.

Local pressure or irradiation are recognized methods of treating keloid5 but these techniques would be inappropriate in this anatomical area: it is impractical to apply firm and sustained compression, and irradiation is undesirable in such proximity to the testes. Excision is unreliable as recurrence and even exacerbation is likely to occur.

Local steroid injection is often effective in treating keloids, although its action is not fully understood. The triamcinolone is injected directly into the lesion in an amount sufficient to cause blanching; the injection can be repeated regularly although after a few doses there is a significant risk of local fat and skin atrophy.

References