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LETTER TO THE EDITOR

Keloid of the circumcision scar: a rare complication

Dear Editors,

Circumcisions have been performed for various cultural and medical reasons, and it is the most frequent surgical procedure performed on boys. The procedure is not difficult but it can cause complications, such as haemorrhaging, penile ischaemia, shortening of the skin, meatal stenosis, urethral fistulas and partial or total loss of phallus (1,2). Keloid formation after circumcision is reported in very few cases in the literature (1–3).

A 10-year-old boy was admitted to our clinic complaining of an enlarged, round scar on the circumcised region, which was causing him pain and itching (Figure 1). The circumcision procedure had been performed 10 months ago. According to his medical history, an unusual lesion appeared on the penile scar 1 month after the operation. Several pomades and topical lotions were applied to the lesion but this did not provide a cure. A circumferential excision was now made at the scar tissue, and the specimen was sent to the pathology department. The histopathological report revealed a large amount of collagen-rich tissue comprised of irregular, thick, dense collagen bundles (Figures 2 and 3). Topical steroid was applied for 1 month after the surgery, and 6 months later the cosmetic appearance was good (Figure 4).

Keloids are caracterised as benign, dense collagen proliferations that contain fibroblasts, mast cells, and proliferating endothelial cells. The endothelial cell mass at the vessels causes hypoxia, which leads to revascularisation. Increased vascularisation is responsible for the excessive collagen formation (3,4). The deltoid, chin, presternal area, back and neck are the commonly affected areas where this benign growth forms (5,6). Keloids of the circumcision scar are a rare complication. Browne stated that the skin of the penis never forms keloid (7). However, a few cases are reported in the literature by Warwick *et al.*, Erdemir, Gurunluoglu *et al.*, and Isken *et al.* (1–3, 8, 9).

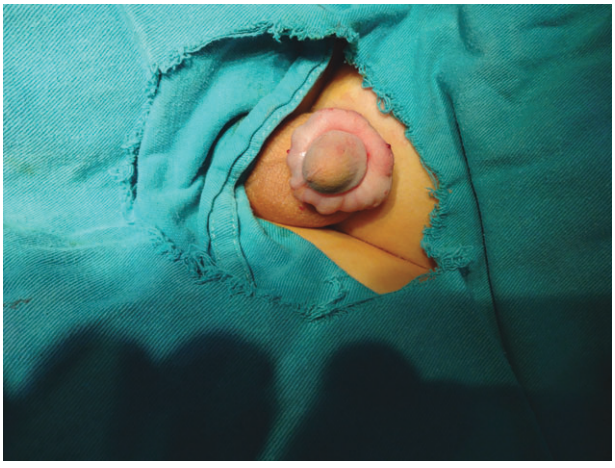

Figure 1 Preoperative view of the keloid tissue.

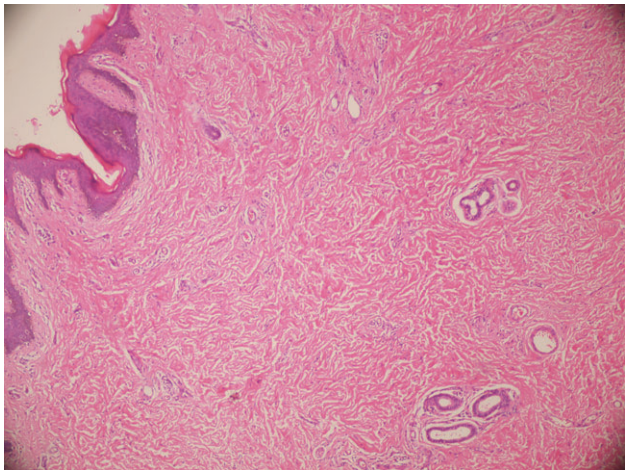

Figure 2 Hematoxylin eosin (HE) collagen-rich tissue that have irregular, thick, dense collagen bundles (×10).

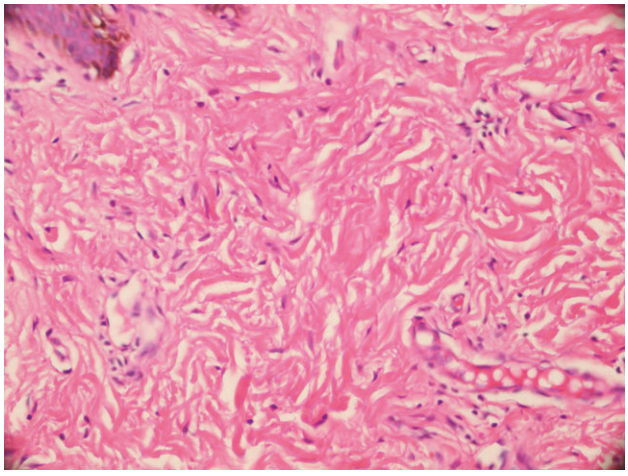

Figure 3 Hematoxylin eosin (HE) close up view of the pathology (×20).

Local pressure and irradiation are inappropriate methods for the treatment of this area (10), and excision is the traditional treatment for keloids and hypertrophic scars. However, the keloid-forming factors must be reduced after excision, and intralesional steroid injection after surgical excision is the other treatment modality. Lee *et al.* developed the core extirpation technique, which requires no adjuvant therapy

Figure 4 Postoperative view of the region at 6 months.

after the procedure (11). However, the keloid was excised and topical steroid treatment was used in this instance. After a 6-month follow-up period, no further complications or recurrence of the lesion were observed.

Although keloids of the circumcision scar are considered an unusual complication, it is likely that such cases are more common than those reported in the literature.

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