

Images in...

Electrocautery-induced gangrene of the glans penis in a child following circumcision

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DESCRIPTION

A 7-year-old child was brought to the hyperbaric oxygen centre because of cyanosis of his glans penis. He had been circumcised the same day with the use of a monopolar electrocautery device. Unfortunately, the electrocautery caused a severe burn injury on the glans of the child. On examination, he had necrosis over the glans and shaft of the penis (figure 1).

Circumcision is a religious and traditional ritual in some cultures and involves the removal of the preputium penis. It may be performed by a variety of techniques, and although it is regarded as a relatively safe procedure, it does, like any surgical procedure, carry the risk of complications. Choosing the most appropriate technique and giving the highest attention and care will avoid most of these complications. Bipolar electrocautery has been shown to be safe in circumcision.¹ However, the use of a monopolar electrocautery, as was the case in this patient, has resulted in a dramatic accident. Indeed, when a monopolar electrode is used, the electrical current is carried by the small diameter of the penis, which may lead to tissue heating and thus thermal injury.² Although adjunctive



Figure 1 Necrosis of glans and penile shaft.



Figure 2 Despite hyperbaric oxygen therapy and wound care, debridement was unavoidable.

hyperbaric oxygen therapy was administered in the following days, the lesion worsened and resulted in significant tissue loss involving the whole glans and the distal parts of the penile shaft (figure 2).

Learning points

- ▶ Monopolar electrocautery should be avoided in circumcision.
- ▶ Choosing the proper technique minimises complication ratio in circumcision.

Competing interests None.

Patient consent Obtained.

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Please cite this article as follows (you will need to access the article online to obtain the date of publication).

Uzun G, Ozdemir Y, Eroglu M, Mutluoglu M. Electrocautery-induced gangrene of the glans penis in a child following circumcision. *BMJ Case Reports* 2012;10.1136/bcr-2012-007096, Published XXX

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