



Circumcision, can this procedure be dangerous for the patient?

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ABSTRACT

Circumcision is one of the most common surgical operations, which is usually a safe and simple procedure with rare complications. Amputation of glans is an uncommon condition but has definitive risk of complication. It's crucial to consider patients based on their age and anatomical conditions, as well as undertaking well sterile surgery for preventing any future complications of circumcision.

In this study we have investigated a complete glans amputation during the circumcision that was initially repaired and the result was good.

1. Introduction

Circumcision is a relatively low-risk operation that has been recommended in different religions. In the whole world, one person has done circumcision out of every 3 men. Circumcision is one of the oldest surgeries of human being and nowadays it is done abundantly by pediatric surgeons [1].

A review in the United States of America showed that circumcision rates are seen up to 61% in newborn babies, many of them were due to cultural issues rather than medical [2]. In 2008, 1.1 million infant circumcisions have been carried out in the USA, and seem to be increasing [3]. Estimated infant circumcision rate from 48.3% in 1988–1991 reached 61.1% in 1997–2001. It shows almost 6.8% rate increasing of circumcision in the year [4].

The benefits of circumcision are: reducing urinary infections and pyelonephritis, reducing genital malignancy and reducing sexually transmitted diseases.

Although circumcision is technically simple and safe, it can sometimes lead to serious complication such as partial or complete genital amputation [11]. The complications related to circumcision depend on different issues such as anatomical anomalies and comorbidities and surgical techniques; surgeon's professionally; patient's age and ... [2].

The most common complication of circumcision is bleeding, which sometimes needs to be emergency re-operated to explore the place of bleeding and to control it [5]. In recent studies the need for re-

operation has been indicated by less than 0.1% [6], however in some studies 3–4.5% is also called [7,8]. Some pediatric surgeons believe that bleeding after surgery is more common in adults although it has not been proven in studies [9]. In some studies, severe complication such as amputation has been reported.

Although amputation of glans is rare, it is very challenging situation for surgeons [10].

In this study we have investigated a complete glans amputation during the circumcision that was initially repaired and the result was good.

2. Case report

A 6 year old boy who had admitted to a charity institution in the city around Mashhad for the circumcision, during the procedure a complete cut of glans from the coronal groove had occurred. Immediately, the bleeding site was bandaged and the glans was put in a plastic bag protected with ice pack. The patient was delivered to Akbar hospital (the referral pediatric hospital) in Mashhad after 4 hours.

The patient was immediately transferred to the operating room; limited debride of the glans and pennies were performed on urinary sound. Glans was sutured to body and finally the skin was reparation (Fig. 1 and 2).

The patient was given antibiotics for 10 days after surgery. Urinary sound was taken out in the second week. The patient's glans had recov-

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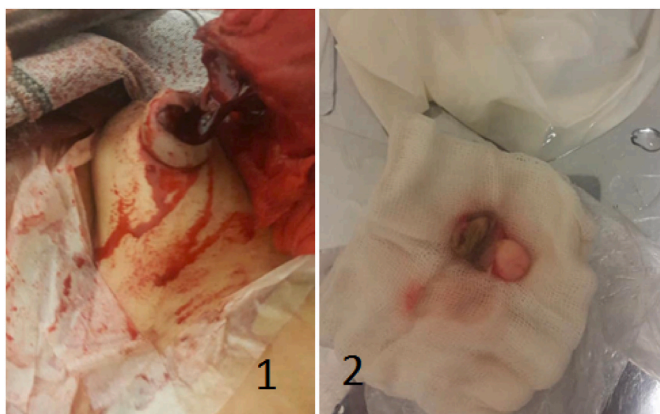


Fig. 1. 1.amputation area 2.amputated glans.



Fig. 2. 1: anastomosis area 2. Amputated glans which was anastomosed.

ered after about a month. There was no sign of any irritation and urinating easily. The cosmetic results were also excellent (Fig. 3).

3. Discussion

Circumcision is one of the most common surgical operations; which is usually a safe and simple procedure with rare complications. However, serious complications can mostly occur at the hands of inexperienced operators who are neither urologists nor surgeons.

Circumcision is reported in 25% of the total men in the world. It is the most common surgery around the world especially in Jewish and Islamic countries. Most of circumcision is done in Islamic countries for religious reasons rather than the medical reasons.

The rate of complications of circumcision surgery is relatively low; many of its complications are self-healed. But some of its complication such as the complete cut of glans requires immediate surgical intervention.

In some articles, even death has been reported as a circumcision's complication. In our opinion the complications of circumcision are preventable if done by professionals. In addition, circumcision by non-professionals increases the risk of infection and transmission of HBV.

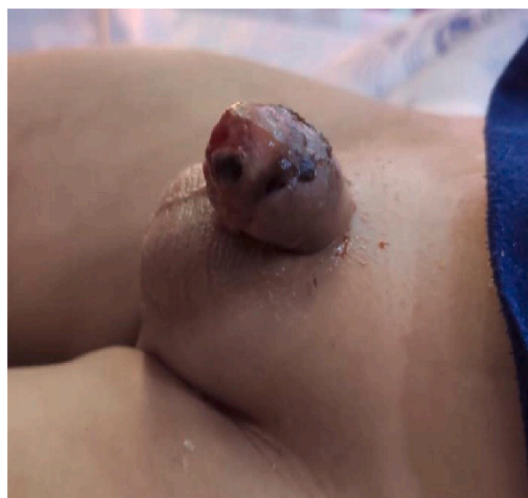


Fig. 3. Two weeks after catheterization and referral to clinic.

It's crucial to consider patients based on their age and anatomical conditions, as well as undertaking well sterile surgery for preventing any future complications of circumcision. A full pre-surgery evaluation of the bleeding history is essential to prevent complications.

The level of amputation is very important in managing these patients. Microvascular surgery is recommended in case of amputation occurred in the shaft of penises [12]. Although in some cases, successful replantation with macrovascular surgery technique has also been reported [13].

If a part of the glans is cut, the amputated tissue must be transplanted immediately and there is no need to microvascular surgery. In cases that the repair was done in the first 8 hours after amputation, the result is likely to be successful in the most cases [14].

Most of the severe complications of circumcision are caused by non-professional people that are easily preventable.

Patient consent

Consent to publish the case report was not obtained. This report does not contain any personal information that could lead to the identification of the patient.

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Authorship

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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