LETTER TO EDITOR

Ensuring the penile glans is fully visible before incising the foreskin is a recommended step during male circumcision to avoid penile glans injury

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Dear Editor-in-Chief,

The majority of ritual circumcisions for males in Malaysia are conducted in primary healthcare facilities. In a study in rural Kedah, 74% of circumcisions were conducted in private general practice clinics.[1] Hospitals in Malaysia generally conduct circumcisions when there is a disease process to the penile foreskin, such as phimosis, paraphimosis, or recurrent posthitis.

The incidence of complications from circumcision is low. In a systematic review examining complications of male circumcisions worldwide, the median frequency of all complications was 1.5%.[2] The majority of complications were minor, such as minimal bleeding or mild infection, for which conservative measures usually provided adequate management.

A rare but dreadful complication of circumcision is injury to the penile glans. This injury can occur in the form of glanular necrosis, laceration, or amputation. Glanular amputation is difficult to manage and requires complex corrective surgery by urologists or plastic surgeons, and satisfactory results are not guaranteed. The true incidence of glanular injury is difficult to determine and may be underreported. When injury to the glans does occur, the case has the potential to attract unfavorable publicity and media attention,[3,4] along with potential adverse legal consequences to the medical practitioner.

In general practice, doctors use various methods to perform circumcisions. These techniques can be categorized into conventional surgery, methods employing electrosurgery or electrocautery, and methods employing various clamp devices.

Regardless of the method used to perform the circumcision, steps to ensure that the glans is fully visible prior to and during the cutting of the foreskin is recommended to avoid penile glans injury. This step is at times omitted for the faster guillotine method. The guillotine method involves pulling the tip of the foreskin distally from the glans, after which an instrument (e.g. forceps or bone-cutter) is used to protect the glans, before incising the foreskin above and adjacent to the instrument. During this step, the glans is not visible when the incision to the foreskin is made. This is when the glans can inadvertently be injured, as reported in 3 cases of glanular amputation in a case series in South Africa.[5]

According to the World Health Organization (WHO), the dorsal slit method is the most widely used surgical method for circumcision.[6] The main advantage of this method is that the glans is visible when the incision to the foreskin is made. This method is also the method of choice of the Malaysian Ministry of Health (MOH) to credential medical assistants in performing circumcisions. The MOH has published an excellent pictorial manual of the dorsal slit technique.[7]

Most circumcisions on young people are performed during school holidays. During this time, medical practitioners may feel the need to adopt faster methods to perform circumcisions. This is the reason circumcisions incorporating electrosurgery or electrocautery methods are popular. Circumcisions using electrosurgery have proven to be faster, and they produce less bleeding.[8] Certain methods of circumcision using electrosurgery or electrocautery involve using the guillotine method to incise the foreskin. This is when penile glans injury can potentially occur.

An approach in which conventional dorsal slit surgery incorporates electrosurgery can also be employed. This is not a novel technique; only the instrument used to perform the main incision to the foreskin is different. This approach ensures visibility of the glans prior to removal of the foreskin, with the benefits of a faster procedure and less bleeding. A dorsal slit is made with scissors to the dorsal aspect of the foreskin, as usual. A bipolar diathermy (e.g., ophthalmic bipolar forceps) is then used to make the circumferential cut to the foreskin instead of scissors. The circumcision is then completed in the conventional manner.

This author is not advocating the ban of the guillotine method in performing circumcisions. This method is widely used among pediatric and general surgeons with no (reported) cases of penile glans injury. For other medical practitioners who do not perform surgery on a regular basis, a dorsal slit to enable the glans to be fully visible prior to incising the rest of the foreskin will likely reduce the incidence of glanular injury. In this regard, it is always wise to adhere to this surgical dictum: "Operate with your eyes, not with your faith."

Conflicts of interest

There are no conflicts of interest.

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References

1. Rashid AK, Teh S-P, Nayaran KA. Traditional male circumcision in a rural community in Kedah, Malaysia. *IeJSME.* 2009;3(2):19–23.
2. Weiss HA, Larke N, Halperin D, et al. Complications of circumcision in male neonates, infants and children: a systematic review. *BMC Urology.* 2010;10:2.
3. Boy loses more in botched circumcision. *The Star.* 2016 Dec 27; Nation.
4. Brown V. Boy loses penis in second botched circumcision. *The Star*. 2016 Dec 29; Nation.
5. Manentsa M, Mukudu H, Koloane N, et al. Complications of high volume circumcision: glans amputation in adolescents; a case report. *BMC Urology*. 2019;19:65.
6. Manual for male circumcision under local anaesthesia. Geneva: World Health Organization; 2009.
7. Tarmizi MN(ed). Garis panduan berkhatan teknik dorsal slit penolong pegawai perubatan. Putrajaya: Ministry of Health, Malaysia; 2018.
8. Fariz MM, Tarmizi MN, Ainaini MH, et al. A prospective randomised comparison of bipolar diathermy versus conventional dorsal slit technique for ritual circumcision: A Malaysian experience. *La Clinica terapeutica*. 2011;162 (6):543–5.