

# A NEW TECHNIQUE FOR CIRCUMCISION

**Marwali Harahap, M.D.**

Professor of Dermatology, Department of Dermatology  
School of Medicine, University of North Sumatra  
Rumah Sakit H. Adam Malik, Medan, Indonesia  
Phone: 62-61-512934, Fax : 62-61-323577

## ABSTRACT

### Background

Circumcision is a surgical procedure performed for religious, cultural, hygienic and therapeutic purposes. In some parts of the world where circumcision is almost universal, mass circumcision is performed among children.

### Objective

The purpose of this work is to show an easy, safe and quick procedure of circumcision.

### Methods

A plastic tube is placed over the glans and the preputial skin is draped over the tube to protect the glans penis. A circumscribing incision is made through both the outer and inner layers of the preputium so that the distal part of the foreskin is separated as a whole. The tourniquet at the base of the penis makes this an almost bloodless procedure.

### Results

Inadvertent injury to the glans is by enlarge impossible, because the glans is protected by the plastic tube. The bloodless field afforded by the tourniquet during incisions enhances visualization of tissues, allows more accurate incisions and good control of the amount of the prepuce removed.

### Conclusions

This new technique is more superior than the other techniques of circumcision, because the en-

tire procedure is done under direct vision, prevent injury to the glans penis, avoid longitudinal incision of the foreskin and use cheap, easily available device. In addition, the surgical time is short.

## A NEW TECHNIQUE FOR CIRCUMCISION

Circumcision is a surgical procedure, performed for many reasons: for religious purposes among Muslims and Jews; for cultural reasons among several African ethnic groups; for reasons of hygiene in the United States, Canada and Australia<sup>(1)</sup> and for therapeutic purposes: inflammation of the preputial skin (balanitis) or the glans penis (posthitis), phimosis, paraphimosis and a variety of new growths confined to foreskin and not amenable or responsive to local therapy such as: condyloma acuminatum or malignant basal or squamous cell carcinoma<sup>(2,3)</sup>. Contraindications to early circumcision are congenital or acquired penile or urethral abnormalities that require the availability of preputial skin for later operative repair. The most common is hypospadias anomaly and this must always be ruled out before circumcision is undertaken<sup>(2)</sup>.

In some parts of the world where circumcision is almost universal, mass circumcision is performed among children. For this purpose, an easy, quick and safe procedure is needed.

### Method

For local anesthesia, lidocaine 1% solution is injected subcutaneously around the penile root.

The prepuce is drawn back to expose the glans penis. Adhesions between the glans and the preputial epithelium are lysed with a gauze sponge until the circumferential cleft between the corona of the glans and the visceral layer of the preputial skin is completely visualized. The foreskin is then reduced over the glans. An incision line overlying the prominence of the corona of the glans is marked with a pen (Fig 1). Traction sutures are placed at the 11, 1 and 6 O'clock position of the preputium to facilitate

Correspondence:  
Prof. Dr. Marwali Harahap at the above mentioned address





Figure 1 An incision line overlying the prominence of the corona of the glans is marked with a pen.



Figure 2 The plastic tube is placed over the glans

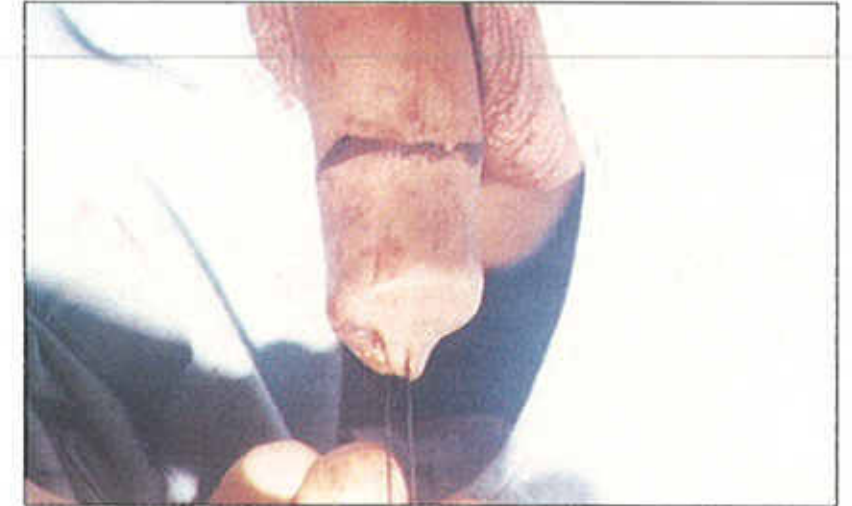


Figure 3 The preputial skin is draped over the tube by pulling the traction sutures; and the sutures are tied.

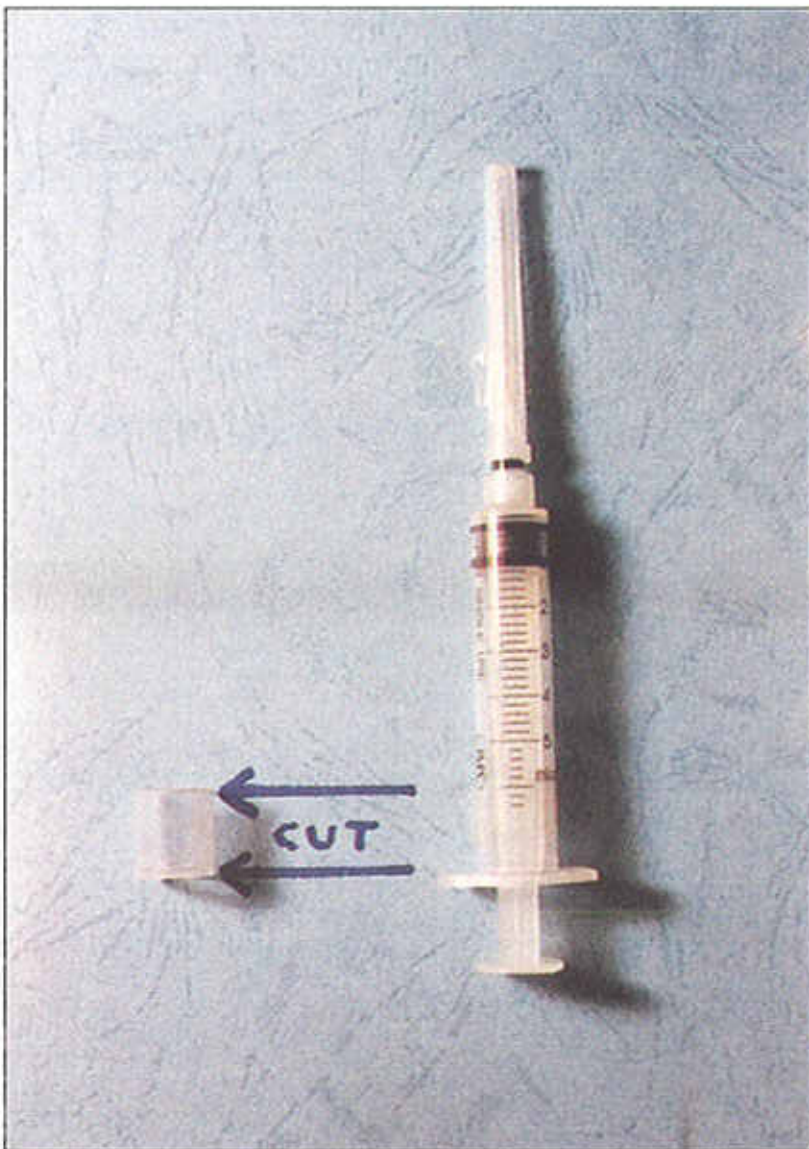


Figure 4 Disposable syringes with different diameters can be cut as plastic tubes for the protection of the glans penis. The disposable syringes varies between 1 cc to 50cc and the length of the plastic tubes is between 1 1/2 to 2 cm depending on the size of the glans penis.



Figure 5 A one centimeter incision is first made with a scalpel on the dorsal part of the preputium.

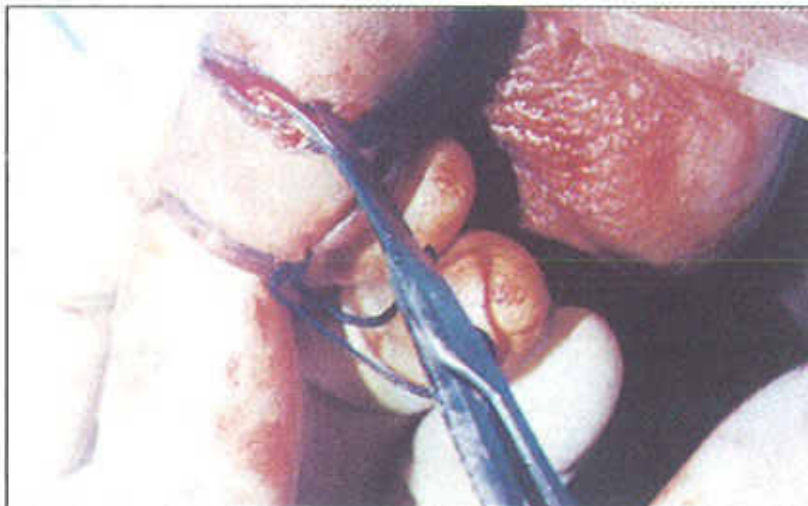


Figure 6 A circumscising incision is then made through both the parietal and visceral prepuce with scissors at the previously marked incision line.



Figure 7 The skin of the penile shaft is sutured to the resected margin of the visceral prepuce with 4-0 chromic catgut sutures.

application of the plastic tube. The plastic tube is placed over the glans (Fig 2) and the preputial skin is draped over the tube by pulling the traction sutures; and the sutures are tied (Fig. 3). Disposable syringes with different diameters can be cut as plastic tubes, for the protection of the glans (Fig 4). The diameters of the disposable syringes used for plastic tubes depend on the size of the glans penis. It varies between 1cc to 50cc. The length of the plastic tube is between 1 1/2 to 2 cm. Penrose drain or rubber band around the base of the penis and secured tightly with a hemostat is used as a tourniquet to reduce blood loss (Fig 5). A one centimeter incision is first made with a scalpel on the dorsal part of

preputium (Fig 6). A circumscising incision is made through both the parietal and visceral prepuce with scissors at the previously marked site and continued until the distal part of the preputium is separated as a whole (Fig 7).

The tourniquet at the base of the penis can make this an almost bloodless procedure. The bloodless field afforded by the tourniquet during incisions enhances visualization of tissues. This allows more accurate incisions. The tourniquet is used only during the incision and lasts only a few minutes. The tourniquet is gradually released. All bleeding points are picked up with fine hemostats and ligated with



4-0 catgut sutures. Small bleeders can be coagulated meticulously with bipolar diathermy.

Instead of penrose drain or rubber band assistant's finger at the root of the penis can have a tourniquet effect and make this an almost bloodless procedure, as well as help pinpoint bleeding points as the fingers are slightly relaxed.

After hemostasis is complete, the skin of the penile shaft is sutured to the resected margin of the visceral prepuce with 4-0 simple chromic catgut sutures placed at 12-, 3-, and 9 O'clock positions that secures the frenular artery. The intervening skin margins are approximated with interrupted sutures of the same material (Fig 8).

#### Discussion

This technique is superior to the dorsal slit method and the guillotine technique because the entire procedure is done under direct vision. Inadvertent injury to the glans is by enlarge impossible, because the glans is protected by the plastic tube. The incision line can be made with precision and there is good control of the amount of the prepuce removed. Longitudinal incision of the preputium as done in dorsal slit, the sleeve resection, and the three wings

technique<sup>(4)</sup> can disseminate infection, when the distal end of the preputium contains infectious lesions, such as condyloma acuminatum and genital herpes. This technique removed the preputium circumferentially as a whole without longitudinal incision. No special calibrated device, such as the Gomco clamp or Plastibell, is required, as the plastic tubes are cheap, easily available and selfmade. In addition, the surgical time is short, usually 5-7 minutes.

#### REFERENCES

1. Vincenzi V and Mertens T. Male circumcision: a role in HIV prevention? *AIDS* 1994; 8: 153-60.
2. Cohen MS. Circumcision. In: Fowler JE Jr. ed. *Urologic Surgery*. Boston: Little, Brown and Company, 1992; 422.
3. Maillard GF, Gumener R. The Genitalia. In: Harahap M. ed. *Skin Surgery*. St. Louis: Warren H. Green, Inc., 1985: 670-2.
4. Harahap M and Siregar AS. Circumcision: A Review and a New Technique. *J. Dermatol Surg Oncol*. 1988; 14: 383-6.