Principal Methods of Male Circumcision

A. Guided Freehand Methods

1. Shield and Knife/Scalpel

This is the method traditional used for a Jewish 'bris'. The foreskin is pulled out in front of the glans, and a metal shield with a slot in it is slid over the foreskin immediately in front of the glans. The scalpel is run across the face of the shield to remove the foreskin. The glans is protected by the shield and the frenulum is not touched.

In a Bris the inner foreskin is then slit back to behind the glans and cut off. In a non-ritual circumcision by this method the inner foreskin may be similarly removed, or may be left intact and just folded back. No stitches are used, the wound simply being bandaged up.

The tightness of the finished result depends on the operator’s skill and whether or not the inner skin is also removed. Since the cut is always in front of the glans a relatively loose result is normal, particularly when the inner skin is not removed – the minimum amount of inner foreskin left being equal to the length of the glans. This method is normally only used on infants. For older children or adults the Forceps Guided method would be used.

2. Forceps Guided

This is a close relative of the Shield and Knife method for older children and adults. The foreskin is pulled out in front of the glans and a pair of stout locking forceps is clamped across it, parallel to the corona of the glans and immediately in front of the glans. The scalpel is run across the face of the forceps furthest from the glans to remove the foreskin. The glans is protected by the forceps. This method does not cut the frenulum but it can be removed before or after the circumcision if desired.

B. Freehand Method

3. Sleeve Resection

The foreskin is slid back along the shaft and a freehand cut is made around the shaft as far back as the scar line is to be placed. The foreskin is returned to cover the glans and another cut is made around the shaft at the same position along its length as the first. A longitudinal cut is made between the two circumferential ones and the strip of skin removed.

The edges are pulled together and sutured. The glans and frenulum are not protected. The frenulum can be included in the main cutting or can be cut separately if desired. Results depend very much on the skill of the surgeon, but can be as tight or loose as desired with the scar line anywhere that is wanted.

C. Occlusion Techniques

4. Plastibell

A plastic bell with a groove at the back of it is slipped between the glans and the foreskin (an initial dorsal slit may be needed to allow the bell to be placed). The foreskin is pulled slightly forward and suture material is looped around in the groove and a surgical knot tied tightly. The thread cuts off the blood supply to the foreskin which withers and drops off in 7 to 10 days, taking the Plastibell with it. It is usual, but not essential, to remove the excess foreskin after the knot is tied – this is mainly cosmetic so that the boy already looks circumcised when returned to his parents. It also reduces the volume of dead foreskin which will drop off and thus reduces parental anxiety a bit. The glans and frenulum are protected by the bell. The frenulum will never be cut when using the Plastibell. Tightness is moderate to slack. Because the bell remains on the penis for a week or so, the foreskin must not be pulled so tightly over it that it is caused to dig into the glans or obstruct the urethra. The groove is always forward of the corona of the glans and hence some inner foreskin must necessarily be retained. Only small size Plastibells are generally marketed and hence the method is only suitable for pre-pubescent boys (the makers say up to about 12 years of age only). No particular surgical skill is required beyond being able to tie a surgical knot. The Plastibell is thus very suitable for use by midwives and medical auxiliaries where doctors are not available.

5. Tara KLamp

This is a Malaysian invention which works in a very similar fashion to the Plastibell except that instead of having to tie suture material around a groove in the bell, plastic arms lock into place to force two surfaces into tight contact; with the foreskin trapped between them. The device is much more bulky than a Plastibell and remains on the penis for 7 to 10 days until it is
removed or falls off with the dead foreskin. No foreskin is cut unless a dorsal slit is required to gain access for the bell part. The glans and frenulum are protected and the frenulum is never cut. The result is moderate to slack.

6. SmartKlamp and Ali's Klamp

These works in the same general way as the Tara KLamp by trapping the foreskin between an outer ring and an inner tube, and thus cutting off the blood supply to the foreskin. Whereas the Tara KLamp is an 'all-in-one' design, with the locking arms at the top, the SmartKlamp consists of separate inner tube and outer clamping/locking part with the locking arms at the side. The Ali's Klamp is very similar but one end of the tube is angled so that the circumcision line will parallel the corona. Once the clamp is in place the excess foreskin is removed using the inside of baseplate as a guide. The glans and frenulum are protected. The result is normally moderate to slack.

7. Zhenxi Rings

A grooved sleeve is passed over the glans to sit just behind the corona. The foreskin is replaced over this sleeve. A hinged plastic clamping ring is fitted over the sleeve, the position of the foreskin is adjusted and the nut tightened to hold the foreskin in place. An elastic cord is then wound tightly around the penis, compressing the foreskin into the groove of the sleeve below it. This cuts off the blood supply and the foreskin forward of it dies and falls off. The glans and frenulum are protected so the frenulum remains intact. The result is expected to be moderately tight, depending on the adjustment before clamping.

D. Other Guided Methods

8. Gomco Clamp

A metal bell is placed over the glans and the foreskin replaced over it (a dorsal slit might be required to allow access for the bell). A metal plate, with a machined under surface in which the rim of the bell sits, is placed over the bell. The foreskin thus lies between the plate and the bell. A tensioning bar is hooked under a T-shaped piece on the top of the bell and screwed down tight to the baseplate: this traps the foreskin in position. A scalpel is run around the upper surface of the plate to remove the foreskin. The whole device comes away with the severed foreskin. Tightness and positioning depend on the amounts of inner and outer skin pulled through between the bell and baseplate before the clamp is finally tightened. The back of the bell is usually very close to the glans rim and hence most of the inner foreskin can be removed if desired. The glans and frenulum are protected. The frenulum can be removed before or after the circumcision if required.

9. Laser

There have been reports of the use of laser surgery for circumcision. Literature references are very hard to find, but with increased use of lasers in other surgery it is quite possibly standard in some quarters. Laser circumcision was first reported as having been used in Israel to circumcise haemophiliac boys who could not otherwise have been circumcised. The glans and frenulum are not protected. Tightness and scar placement are both unknown quantities.

10. Other Methods

There are a variety of other patented clamps and shields, all of which are related in some way to the traditional Shield and Knife method or the Gomco Clamp method. There are also numerous methods of freehand working which are variations on either the Forceps Guided or the Sleeve Resection method.

A comprehensive list of the many devices that have been devised to aid circumcision can be found on the Circlist web site at http://www.circlist.com