Circumcision and its modern procedure

Presented by

Dr. Munal Mahbub

Vice President , Chittagong Woman Chamber CEO – Surgiscope Hospital

What is it?

 Male circumcision is the removal of the foreskin from the human penis. In the most common procedure, the foreskin is opened, adhesions are removed, and the foreskin is separated from the glans. After that, a circumcision device may be placed and then the foreskin is cut off. Topical or locally injected anesthesia is sometimes used to reduce pain and physiologic stress. For adults and children, general anesthesia is an option and the procedure may be performed without a specialized circumcision device

What are the relative indications for circumcision?

- Circumcision is performed for various conditions, but their natural course suggests that this is not always necessary. There are also many relative indications for circumcision, including the prevention of penile and cervical cancer, the prevention of sexually transmitted infection, particularly HIV, and the prevention of urinary tract infection. Many surgeons would also perform a circumcision during surgery for hypospadias.
- Paraphimosis
- Balanoposthitis and balanitis
- Preputial "pearls" and redundant foreskin
- Phimosis
- Prevention of sexually transmitted infections
- Prevention of HIV infection
- Prevention of penile cancer
- Prevention of urinary tract infection in boys with urological abnormalities
- Trauma
- Hypospadias surgery and its variants
- Religious Purpose

How is it done?

- **Circumcision surgical procedure** in males involves either a conventional "**cut and stitch**" surgical procedure or use of a circumcision instrument or device. In the newborn period (less than 2 months of age), almost all circumcisions are done by generalist physicians using one of three surgical instruments. In the USA, the **Gomco clamp** is the most utilized instrument, followed by the **Mogen clamp and the Plastibell** They are also used worldwide.
- Complications may include bleeding, infection, and too little or too much tissue removal.
- Deaths are rare. After the newborn period, circumcision has a higher risk of complications, especially bleeding and anesthetic complications.
- Currently, most circumcisions in boys and men are performed using one of three open surgical
 methods. The forceps-guided method, the dorsal slit method, and the sleeve resection method
 are well described by the World Health Organization in their Manual for Male Circumcision under
 Local Anaesthesia. The Gomco clamp and Mogen clamp are sometimes used after the newborn
 period, in conjunction with either or cyanoacrylate tissue adhesive to prevent post-operative bleeding
- Circumcision surgical instruments should be distinguished from circumcision devices. Circumcision instruments are used at the time of surgery, and the circumcision is complete at the end of the procedure. **The Gomco clamp, the Mogen clamp, and Unicirc** are surgical instruments. Circumcision devices remain on the penis for 4 to 7 days and either spontaneously detach or are removed surgically at a subsequent visit. **Plastibell, Prepex**,
- **Shang Ring and other plastic rings** are all circumcision devices, also known as "in situ" devices Circumcision via instrument results in healing by primary intention and healing via devices is by secondary intention, so healing is delayed. All circumcision procedures should involve adequate injectable or topical anesthesia.

Complications & Problems



Scarring of glans



Intact penis, retracted

Circ scar, keratinization

Meatal stenosis









Adhesions

Buried penis

Too much skin removed

Too much skin removed 5

Other Complications

- There is a higher complication rate in adolescents and adults than in neonates and children.
- Minor complications include:
- Haemorrhage.
- Local infection.
- Meatal stenosis.
- Secondary phimosis .
- Adhesions or skin bridge joining the penile shaft and glans.
- More severe complications include:
- Septicaemia.
- Removal of the end of the penis.
- Removal of too much foreskin.
- Urethrocutaneous fistula.
- Problems with sexual function have been reported,

Catastrophic

- Damage to or loss of the glans (head)
- Loss of the entire penis
 - electro-cauterization
 - surgical mishap
 - infection
- Death
 - 2-3 per year reported in media
 - some estimate 100 deaths in U.S. each year





Information Gap

- Many parents' decisions are preconceived¹
- Lack of informed consent:
 - Details of procedure
 - Risks
 - Alternative of not circumcising
 - Functions of the foreskin
 - Consideration of the child's perspective & choice
- Lack of knowledge among caregivers
- <u>Assumption</u>: foreskin has no value



" in situ" device " The Shang Ring "



- Its Simple
- Easy
- Safe
- Quick



Shang Ring Circumcision

 Measure the penis with special measuring tape.





2. After inner ring is placed over the penis, grasp edges of the foreskin.



3. Flip the foreskin over the inner ring

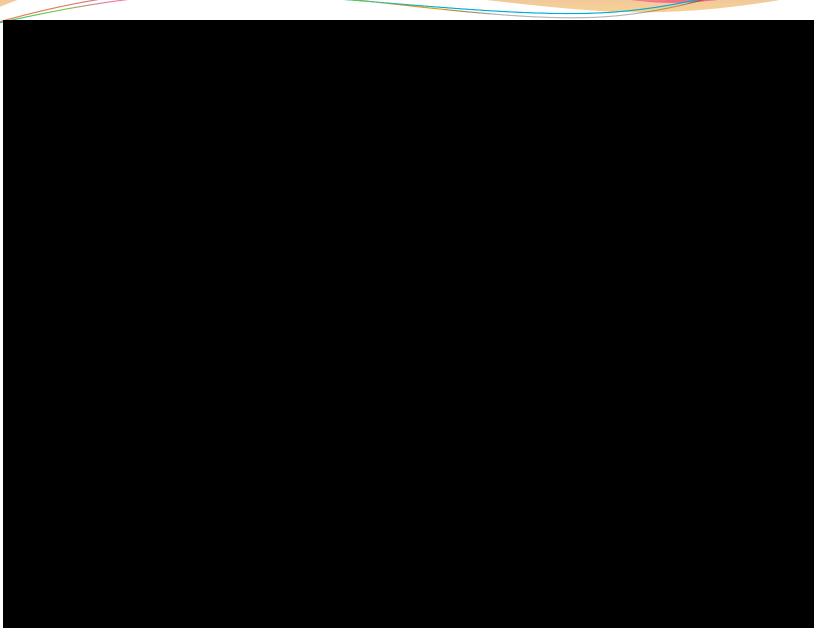


4. Cut the foreskin on the underside of the device.



5. The device in place.

Visual Presentation



Why is it better?

- No sutures necessary
- Rapid Procedural time (2-5 mins)
- Less Bleeding
- Frenulum is well preserved
- Low complication rate
- Excellent cosmesis
- Easy to teach and learn
- High satisfaction among medical providers and patients

Potential Medical Benefits

- Reduction in UTIs (first year)
 - UTIs are uncommon (1%) & treatable
 - Baby girls have more UTIs
- Reduction in Penile Cancer
 - Rare (1 in 100,000), only affects elderly men
- Reduction in Cervical Cancer
 - Related to HPV, best prevented through safe sex
- Reduction in STDs and HIV
 - Problems with studies; safe sex (condoms) still required
 - U.S. has high rates of circumcision and high rates of STDs