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## Indications and Benefits

- Family/patient preference (cultural/religious/social).
- Symptomatic or persistent phimosis.
- Recurrent balanitis or balanoposthitis.
- Recurrent paraphimosis.
- Urinary tract infections.
- Lichen sclerosus (balanitis xerotica obliterans).
- Benefits: Reduces the risk of urinary tract infection in first year of life, reduces the risk of sexually transmitted infections, and reduces the risk of penile cancer.

## Risks and Alternatives

- Standard risks (bleeding, infection, need for additional procedures, and general/regional anesthesia)
- Injury to adjacent structures (urethra or glans)
- Skin dehiscence
- Excess skin removed

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- Persistent redundant foreskin
- Penile concealment/secondary phimosis (cicatrix)
- Meatal stenosis
- Skin bridging/adhesions
- Suture tracks
- Alternatives: Steroid cream or dorsal slit in patients with symptomatic phimosis but who wish to avoid circumcision

## Essential Steps

1. Retract the foreskin completely, remove smegma, and manually lyse adhesions prior to surgical preparation (If unable to retract, will need dorsal slit and second preparation in surgical sterile field).
2. Surgical preparation and drape.
3. Monopolar cautery is set at 15 coagulation and 15 cut (authors' preference).
4. Injection of local anesthesia for penile block if no regional block performed (before or after procedure per surgeon preference).
5. Retract the foreskin.
6. Place glans holding suture dorsal to meatus (5-0 Prolene on taper needle; authors' preference).
7. If prominent frenulum, lift up and away from penis and using cutting current incise this band, lightly touch any bleeding with coagulation current to achieve hemostasis.

8. With penis on full stretch, mark the distal (inner) line of the incision below the glans of the penis leaving a 1–2-cm glans collar.
  9. Incise the distal (inner) circumferential incision through skin only with either knife or cutting electrocautery current.
  10. Using combination of sharp dissection and/or cutting and coagulation electrocautery current, partially deglove the penis down to the level where proximal incision is expected to be made.
  11. With the penis on full stretch, reduce foreskin over the glans taking care not to pull up any ventral scrotal skin onto the shaft and mark the proximal (outer) line of the incision just distal to the impression made by the free edge of the glans collar (If there is concern about scrotal skin at the level of the proximal shaft, the proximal (outer) circumcision incision can be carried more distal on the ventral surface to allow this skin to drop down).
  12. Incise the proximal (outer) circumferential incision through skin only with either knife or cutting electrocautery current.
  13. Connect the two circumferential incisions and remove the intervening foreskin (If the penis was initially degloved down to the level of the proximal incision, the intervening foreskin can be removed with minimal further dissection).
  14. Meticulously evaluate for any bleeding and achieve complete hemostasis with coagulation electrocautery current.
  15. Reapproximate the skin edges with interrupted full thickness or running subcuticular 4-0 or 5-0 fast absorbing sutures.
  16. Apply wrap dressing or surgical glue (as per surgeons' preference).
  17. Remove holding suture.
- While marking the proximal (outer) incision, if the imprint of the free edge of the collar is not visible, a dorsal and ventral slit can be made to identify the appropriate level prior to excising the redundant foreskin.
  - If penile torsion is present, the penis rotation should be corrected after complete degloving and positioned in the appropriate orientation as sutures are placed. More severe levels of penile torsion (>90 degrees) may require an absorbable anchoring suture proximally at the dorsal midline. (Knowledge of penile neurovascular anatomy is required to safely perform this step.)
  - If moderate-to-severe tethering of the scrotum to penile shaft skin is noted, a formal scrotoplasty may be required to avoid a poor surgical outcome.
  - If there is a prominent pubic fat pad where the penis becomes concealed when off traction, an absorbable anchoring suture proximally at the dorsal midline may be necessary to avoid healing complications. (Knowledge of penile neurovascular anatomy is required to safely perform this step.)
  - Varying degrees of penile chordee with or without hypospadias require additional surgical maneuvers not covered in this chapter.

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### Template Operative Dictation (Open)

**Preoperative Diagnosis** Intact foreskin/phimosis

**Postoperative Diagnosis** Same as preoperative diagnosis

**Findings** Intact foreskin/phimosis

**Procedure(s) Performed** Circumcision

**Anesthesia** General/local

**Specimen** Foreskin (no need to send as specimen unless concern for abnormal pathology or institutional policy)

**Estimated Blood Loss** Minimal

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### Note These Variations

- Rather than degloving the penis after the initial incision, both circumferential incisions (inner and outer) may be made followed by careful dissection of the intervening foreskin from the underlying tissue and shaft to allow removal.

**Indications** This is a/an \_\_\_-day/week/month/year-old male with an intact foreskin. The family did request circumcision.

**Procedure in Detail** Following satisfactory induction of general anesthesia, the patient was placed in the supine position on the operating room bed and appropriately padded. A surgical timeout was performed to identify the patient and confirm the procedure. The foreskin was manually retracted clearing preputial adhesions and smegma. The penis and pubic area was then prepped and draped in the typical sterile fashion. In the surgical field, a local penile block was performed, the foreskin was retracted, and a 5-0 Prolene holding suture was then placed in the glans dorsal to the meatus. With the penis on stretch using the holding suture, the frenulum was incised with electrocautery and the base coagulated for hemostasis. A 1–2-cm glans collar was marked and incised with electrocautery

on cutting current, taking care to only cut the skin layer and avoid any injury to deeper tissues. The penis was then partially degloved using electrocautery. Again with the penis on full stretch, the foreskin was reduced over the glans and the proximal incision was marked just distal to the imprint of the free edge of the glans collar. The proximal circumferential incision was made using electrocautery on cutting current. A longitudinal incision connecting the two circumferential incisions was made and the intervening foreskin was removed. Hemostasis was achieved with electrocautery. The two skin edges were reapproximated using interrupted 5-0 chromic sutures. A medium tegaderm was cut to size, and then placed as a wrap dressing along the entire length of the penis. The holding suture was removed. The patient tolerated the procedure well, was extubated in the operating room, and was transported to the post anesthesia care unit in stable condition.