



Figure 1: Raw area over glans at the time of circumcision

Use of collagen in post-circumcision raw area of glans

Sir,

Circumcision is an age-old and one of the most common surgeries being performed for phimosis.^[1] Phimosis is the inability to retract the prepuce down over the glans penis, which can be the result of adherence to the glans or a fibrotic preputial ring.^[2] In younger age, the most common cause of phimosis is recurrent balanoposthitis, which leads to adhesions between the glans and the inner leaf of the prepuce.

Removal of prepuce adhesions during circumcision leaves raw area on glans. Contamination of this raw area with the urine during micturition, especially dribbling at the end, leads to severe pain, requiring analgesics round the clock. Many times the child withholds micturition because of the fear of pain. The healing might be delayed because of infection. Purulent discharge and the fiery red appearance of glans also make parents scary.

At the time of circumcision, after suturing inner and outer leaves of the prepuce, we routinely cover raw area over glans with a small piece of type I collagen dry sheet. Suture line is not covered with collagen. Non-adherent dressing is applied over it, which is removed on the very 2nd day and the area is kept open. We routinely use first-generation cephalosporin as an antibiotic cover for 7 days. There was not a single incidence of purulent discharge or fluid collection

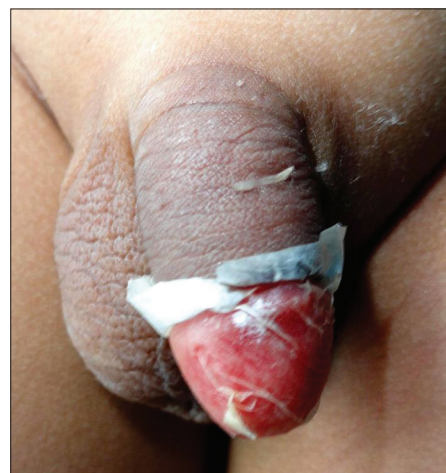


Figure 2: Coverage of raw area with collagen



Figure 3: Healed glans

underneath the collagen in our series. Collagen comes off in 7–10 days after complete healing of glans. We have used collagen on 26 glans in the last 3 years with consistently good results. As it was difficult to analyse

pain very accurately in children, overall discomforts and post-voiding excessive crying were considered as the indicators of pain [Figures 1-3].

Advantages of collagen are well known. It^[3] provides a transient physiological closure by creating a wound environment that diminishes bacterial proliferation, prevents contamination and desiccation, and promotes more rapid wound healing. It protects the wound from trauma. It reduces the pain and inflammation, and thereby the child's discomfort. There is no need for repeated dressings. The patients do not need any analgesics from 2nd day. Exposed dressing allows daily inspection of glans for any sign of inflammation or collection underneath. If required, collagen can be re-applied without the need of anaesthesia. Above all, collagen is cheap and readily available with all plastic surgeons. The cost of required collagen sheet is less than INR 100.00 and it saves a child from pain, suffering and analgesics. We do feel that this simple measure substantially improves the comfort of patient, parents and physician.

Hemant A. Saraiya

Sushrut Plastic Surgery Research Center,
Consultant Plastic Surgeon, Gujarat Cancer and Research
Institute, Ahmedabad, Gujarat, India

Address for correspondence:

Dr. Hemant A. Saraiya, 10, Avanti Apartments, Bhagvan
Nagar No Tekro, Paldi, Ahmedabad - 380 007, Gujarat, India.
E-mail: drhemantsaraiya@hotmail.com;
drhemantsaraiya@yahoo.com

REFERENCES

1. Speert, H. Circumcision of the newborn: Appraisal of its current status. *Obstet Gynecol* 1953;2:164-72.
2. Orsola A, Caffaratti J, Garat JM. Conservative treatment of phimosis in children using a topical steroid. *Urology* 2000;56:307-10.
3. Lazovic G, Colic M, Grubor M, Jovanovic M. The application of collagen sheet in open wound healing. *Ann Burns Fire Disasters* 2005;18:151-6.

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