

SURGICAL PEARLS ABSTRACTS

Buccal Mucosa Grafts for Reconstruction in Patients With Female Genital Mutilation

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AIM: Reconstruction after female genital mutilation is a relatively new concept in the United States aimed to improve pain and sexual function and to restore a normal physical appearance. The buccal mucosa has been described as a donor-site option for reconstruction of eyelids, cheeks, larynx, urethra, and more recently the vagina. Here we present the novel use of buccal mucosal grafts in the reconstruction of external female genitalia after female genital mutilation.

METHODS:

1. Mouth is irrigated with Peridex solution and throat pack is placed.
2. Rectangular piece of thin buccal mucosa is harvested using a #15 blade with care to avoid important structures such as buccal fat pads, buccinator muscle, and Stensen's duct. Incisions are closed in a single running layer with 4-0 chromic suture.
3. Anterior abdomen fat harvesting is performed using standard Coleman technique. Fat is processed via Telfa rolling on back table.
4. Clitoral scar is incised or excised with careful attention to avoid injury to deeper nerves.
5. A flap harvested from the superior aspect of clitoral skin is rotated inferiorly to cover the superior aspect of the clitoral hood. The remainder of the hood is resurfaced using shaped portions of the buccal mucosa sutured with 4-0 chromic.
6. Flaps from the labia majora are rotated laterally and imbricated to the periosteum with interrupted 4-0 chromic. Medial flaps designed to become the new labia minora are subsequently covered with buccal mucosal grafts on their lateral aspects.
7. Buccal mucosal grafts were dressed with xeroform and antibiotic bolsters.
8. Fat subsequently grafted into bilateral labia majora inferiorly and superiorly into the vulvar region to encourage regeneration of the surgical site.

RESULTS: The authors have observed excellent cosmetic outcomes at 6 months postoperatively with well-incorporated

tissue. Patients report significantly improved functional outcomes with postoperative clitoral retraining therapy.

CONCLUSIONS: Benefits of using the buccal mucosa as a donor site are similar to those reported previously. Namely, these include an inconspicuous donor site scar, primary closure of the donor site, and a decreased need for local tissue rearrangement and distortion of anatomy due to a distant donor site.^{1,2} As with any new technique, further investigation is needed to examine the long-term functional and cosmetic outcomes, including patient satisfaction and sexual function. Exposure of this technique to plastic surgeons will enable the therapeutic benefits to this greatly underserved population.

REFERENCES:

1. Cohen SD, Armenakas NA, Light DM, et al. Single-surgeon experience of 87 buccal mucosal graft harvests. *Plast Reconstr Surg.* 2012;130:101–104.
2. Simman R, Jackson IT, Andrus L. Prefabricated buccal mucosa-lined flap in an animal model that could be used for vaginal reconstruction. *Plast Reconstr Surg.* 2002;109:1044–1049.

Clinical Performance of a Skin Barrier Device as Part of a Standardized Infection Reduction Study of 218 Implant-based Breast Reconstructions

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PURPOSE: Due to the critical impact of breast implant infection on quality of life of breast cancer patients, we have published the performance characteristics of an evidence-based protocol that significantly reduced but did not eliminate Gram-positive infection after mastectomy. To provide a skin barrier against bacterial contamination from the skin flora, we added the Alexis wound manager (AWM) to the evidence-based protocol at the time of immediate expander placement.

METHODS: An evidence-based protocol was developed including preoperative decolonization with intranasal Bac-troban, and chlorhexidine body wash for 5 days, intraoperative double gloving with glove change, chest prep before expander placement, triple and povidone iodine washes of implant and pocket and postoperative Gram-positive oral antibiotic prophylaxis until drain removal. In an effort to