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Alwaal, A
Harris, CR
Enriquez, A
et al.

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Healing of Donor-site Buccal Mucosa Urethroplasty

Amjad Alwaal, Catherine R. Harris, Anthony Enriquez, Jack W. McAninch, and Benjamin N. Breyer

Buccal mucosal graft represents the gold standard graft material for urethroplasty because of its thick epithelium and a thin lamina propria for maximal graft uptake. There is an ongoing debate whether to close the buccal graft donor site. We show a unique look at buccal donor site healing through serial pictures over a 100-day period. In this patient, the anterior half of the buccal donor site was closed at the time of harvest, allowing real-time observation of wound healing from both the closed and open aspects of the wound. UROLOGY 86: e9–e10, 2015. © 2015 Elsevier Inc.

A 25-year-old man with a 2.8-cm bulbar urethral stricture underwent a dorsal-onlay urethroplasty using buccal mucosal graft from the left cheek. We closed the buccal site in our typical fashion by reapproximating the anterior half of the wound with interrupted 4-0 chromic sutures, leaving the posterior half of the wound to heal by secondary intention to allow for hematoma drainage.1

At 3-month follow-up visit, the patient is voiding well with no evidence of stricture recurrence, and his buccal graft donor site is well-healed. Throughout his recovery, the patient took pictures of the graft donor site (Fig. 1). An accompanying video shows a compilation of all the pictures taken chronologically throughout the 100-day postoperative period.

There is controversy as to whether to close the buccal mucosal graft donor site. A prospective study2 and 2 randomized controlled trials3,4 showed benefit for nonclosure in terms of less pain and earlier return to diet. However, another randomized controlled trial5 showed less immediate postoperative pain and faster return of diet in the primary closure group. These pictures and the accompanying video provide a unique opportunity for up-close examination of the donor-site healing process.

References


Video Clips cited in this article can be found at http://dx.doi.org/10.1016/j.urology.2015.06.032.

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From the Department of Urology, University of California San Francisco, San Francisco, CA; and the Department of Urology, King Abdulaziz University, Jeddah, Saudi Arabia

Address correspondence to: Amjad Alwaal, M.D., M.Sc., F.R.C.S.C., Department of Urology, University of California San Francisco, San Francisco General Hospital, 1001 Potrero Avenue, Suite 3A20, San Francisco, CA 94117. E-mail: amjadwal@yahoo.com

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Figure 1. Healing of buccal donor site through serial pictures over a 100-day period (black arrow: closed side of the wounds; white arrow and triangle: open side of the wound).