

Single-stage perineal repair of panurethral stricture disease with buccal mucosal grafting

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Introduction: Strictures involving the full length of anterior urethra (panurethral) are a demanding reconstructive challenge. The use of buccal mucosal (BM) grafts for dorsal onlay patching of the urethra has provided good functional and cosmetic results for these strictures extending from the proximal bulbar urethra up to the external meatus. We report our experience with the use of single strips of buccal mucosal grafts for reconstruction of panurethral stricture disease

Patients and methods: From January 1995 to December 2005, a total of 86 patients underwent urethroplasty in our institutions, 9 of whom had a one-stage single buccal mucosal dorsal onlay graft procedure through a perineal approach. In those patients in whom the stricture involved the external meatus, a small ventral subcoronal incision was added to repair the most distal segment of the urethra. Penile shaft degloving was avoided in all 9

patients. Buccal mucosal graft strips varied between 12 and 17 cm in length.

Results: The median follow-up was 34 months (range 8 to 56). The overall complication rate both at the donor and recipient sites were acceptably low, the main complications being oral numbness in 33% (3 in 9), and persistent difficulty in moth opening in 22% (2 in 9). No patient developed oral wound infections or experienced changes in salivary function. The3 stricture recurrence was 9% (1 in9). Slight ventral curvature on erection occurred in 33% (3 in 9). None developed erectile or ejaculatory dysfunction. No urethrocutaneous fistula or diverticulum formation occurred.

Conclusion: The single-stage dorsal onlay buccal mucosal grafting procedure through a perineal approach is a good, feasible and reproducible technique for the treatment of panurethral stricture disease.