Abstract

Background: To repair long-segment urethral strictures is a challenging problem.

Objective: To describe a new technique for harvesting long lingual mucosal graft (LMG).

Design, Setting, and Participants: We performed a retrospective observational study of patients who underwent LMG harvested from lateral lining of the tongue for long-segment anterior urethral strictures repair from 2012 to 2014 at the Shanghai Sixth People's Hospital. Patients who had 12 months minimum follow-up were included. Patients with incomplete clinical records were excluded. The LMG was applied on the urethra according to the dorsal onlay technique.

Outcome Measurements and Statistical Analysis: The primary outcome of the study was the evaluation of results. The secondary outcome was to evaluate early and late complications at the harvesting site. Success was defined as Qmax>12 ml/s and no postoperative procedures. Data were compared with chi-square test, and Student's t test using SPSS 17.0 software. P value less than 0.05 was considered different.

Results and limitations: One hundred and one patients were included. The median stricture length was 7.1±3.6 cm, the median length of LMG was 7.2±3.6 cm. The success rate was 81.2% with a median follow-up of 23 months. Complications at the donor site occurred in 41 patients at sixth month follow up, and maintained in 18 patients at the twelve months follow up. The bilateral harvesting and length is the main factor influencing the incidence of complications (P=0.0038 for 6 months and P=0.1112 for 12 months). Almost half of donor site complications subsided within 12 months (P=0.0018).

Conclusions: In patients requiring long oral grafts > 7 cm to repair anterior strictures, a valid option should be to harvest the graft form the lateral lining of the tongue.

Patient summary: The tongue may provide a oral graft longer than 7. cm to repair long-segment anterior strictures.