

techniques (onlay vs. inlay) were comparable between the groups (all  $P \geq 0.1$ ). Overall success rates in initial, repeat, and secondary BMGU were 87.4%, 87.5%, and 70.6%, respectively. In Kaplan-Meier analyses, patients undergoing secondary BMGU fared significantly worse than those undergoing repeat or initial BMGU ( $P=0.010$ ). This held true in a multivariable model and secondary BMGU was an independent risk factor of recurrence (HR=2.42; 95% CI=1.03-5.68;  $P=0.043$ ).

**CONCLUSIONS:** We showed excellent results for repeat anterior one-stage BMGU, comparable to patients without previous urethroplasty. Patients undergoing secondary BMGU with a history of prior urethroplasty of different technique are at higher risk of recurrence. However, when performed in a specialized center, success rates are still relatively high.

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**PD30-06  
ANTERIOR URETHROPLASTY USING A NEW TISSUE  
ENGINEERED ORAL MUCOSA GRAFT: SURGICAL TECHNIQUES  
AND OUTCOMES**

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**INTRODUCTION AND OBJECTIVES:** To evaluate the safety, feasibility and efficacy of a new tissue engineered oral mucosa graft in anterior urethra reconstruction.

**METHODS:** Retrospective, multicenter study including patients with recurrent anterior strictures excluding patients with failed hypospadias, lichen sclerosus, traumatic strictures, posterior strictures. The primary outcome of the study was to evaluate the results of urethroplasty (success vs failure) and the secondary outcome was to register local or systemic adverse events related to the implant of tissue engineered material. Oral mucosa biopsy of 0.5 cm<sup>2</sup> was taken from patient's cheek and sent to the Good Manufacturing Practice laboratory for manufacturing the graft. After 3 weeks, the tissue engineered oral mucosal graft (MukoCell®) was sent to the hospital for anterior urethroplasty. The tissue engineered oral mucosal graft (MukoCell®) implanted in the context of this study has the market authorization in Germany and was provided by UroTiss GmbH. Four different techniques were used: ventral onlay, dorsal onlay, dorsal inlay and combined (ventral onlay + dorsal inlay). Voiding cysto-urethrography was performed one month following the urethroplasty. Patients underwent clinical evaluation, uroflowmetry and residual urine measurement every 6 months. When patient showed obstructive symptoms, and/or Qmax < 12 ml/sec, the urethrography was repeated. Patients who underwent further treatment for recurrent stricture were classified as failures.

**RESULTS:** During the period 2010 - 2016, 38 patients (median age 57 years) were included in the study. Stricture site was penile in 3 (7.9%) cases, bulbar in 29 (76.3%) and peno-bulbar in 6 (15.8%). The majority of patients (94.7%) undergone previous failed treatments. Median stricture length was 5 cm, median pre-operative Qmax was 5.9 ml/sec, median post-operative Qmax was 20.6 ml/sec, median follow-up was 55 months. From 38 patients, 32 (84.2%) were success and 6 (15.8%) failures. Ventral onlay grafting showed 85.7% success rate, dorsal onlay 83.3%, dorsal inlay 80%, combined technique 100%. No local or systemic adverse reactions due to the use of engineered material were registered. Failures were treated by permanent catheter (1 case), dilations (2 cases), urethrotomy (1 case), urethroplasty using native oral mucosa (2 cases).

**CONCLUSIONS:** The use in 38 patients of a new tissue engineered oral mucosal graft (MukoCell®) for penile, bulbar and peno-bulbar urethral strictures showed satisfactory results at median 55 months follow-up. The success rate of four different techniques are comparable to the use of native oral mucosa graft without any significant adverse reactions.

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**PD30-07  
PREVALENCE OF POST-VOID DRIBBLING BEFORE AND AFTER  
ANTERIOR URETHROPLASTY**

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**INTRODUCTION AND OBJECTIVES:** Post-void dribbling (PVD) is a lower urinary tract symptom that negatively affects quality of life and is thought to be prevalent after urethral reconstruction for stricture disease. However, the mechanism for post-urethroplasty PVD has yet to be established. Furthermore, its relationship to pre-operative PVD has never been elucidated. This study aims to define the prevalence of pre- and post-operative PVD and to determine risk factors for its presence.

**METHODS:** A retrospective review of a prospectively maintained multi-institutional database was performed to evaluate PVD utilizing a single question from a validated questionnaire: "How often have you had a slight wetting of your pants a few minutes after you had finished urinating and had dressed yourself?" (Never (0) - All the Time (4)). Presence of PVD was defined as any answer > 0, and comparisons were made to stricture type, and location, and repair type.

**RESULTS:** Pre- and post-operative PVD questions were answered by 614 and 383 patients, respectively. Pre-operative PVD was present in 73% of patients and predicted by higher BMI ( $p=0.006$ ) and stricture location (penile;  $p<0.0001$ ). Overall post-operative PVD was present in 41% and statistically higher in those undergoing penile urethroplasty (44%;  $p<0.001$ ), and those with repairs that utilized dorsal (46%;  $p<0.0001$ ) and/or ventral (43%;  $p<0.0001$ ) buccal grafts. Of patient with both pre- and post-op PVD testing, 60% reported improvement, 32% were unchanged, and 8% reported worsening symptoms (Figure 1).

**CONCLUSIONS:** Pre-operative PVD is high (70%) and likely under reported. Most patients' PVD improves after urethroplasty, though patients with penile strictures and those requiring grafts still report it more often. The mechanism of PVD will need to be established before preventative surgical measures can be taken.

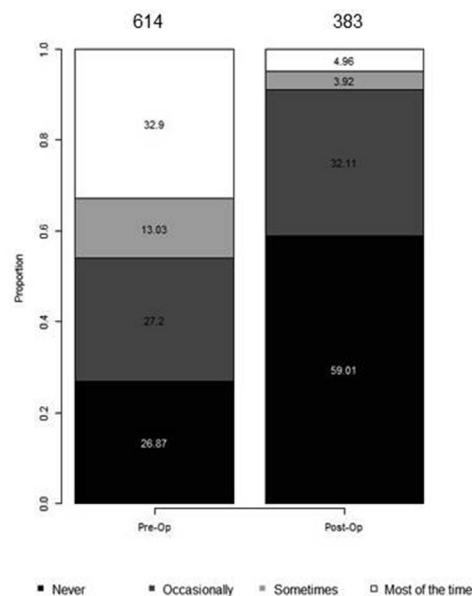


Figure 1. Distribution of pre-and post-operative post-void dribbling scores

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