

Hypothesis / aims of study

Urethral stenosis, a complex condition, poses diagnostic and therapeutic challenges, significantly impacting patients' lives. Surgical options include low-invasive procedures like dilation and stents, but reconstructive urethroplasties are now favored for their effectiveness.

Oral mucosa grafts are commonly used due to their favorable properties, though complications at the donor site require consideration. Limited research on long-term oral health-related quality of life exists, with the "Oral Impacts on Daily Performances (OIDP)" questionnaire being a valuable tool for assessment [1].

The aim of this study is to analyse the oral health-related quality of life of individuals undergoing urethroplasty with and without oral mucosa graft in the late postoperative period.

Study design, Materials and Methods

Retrospective study, comparing patients who underwent urethroplasty without oral mucosa grafts with those in whom grafts were used, using the “Oral Impacts on Daily Performances (OIDP)” questionnaire, validated for Portuguese. The instrument was applied in the late postoperative period of 41 patients who underwent urethroplasty in a tertiary hospital between 2016 and 2020.

The data were analysed by rate, standard deviation, proportion, and average. Comparisons between the groups with and without oral mucosa graft were performed using the Mann-Whitney tests, Fisher's exact test, t-Student for independent samples and Pearson's chi-squared test. To assess the score in relation to time, complementary inferential analysis and two-way analysis of variance (ANOVA) were performed. p<0.05 was considered for statistical significance. The statistical package SPSS version 22.0 and Excel 2016 were used.

Figure 1 Questionnaire ‘Oral Impacts on Daily Performances - OIDP’

Name: _____	In the past 6 months, problems with your mouth have caused you any difficulty to:	In the past 6 months, how often have you had difficulty to:	On a scale of 1 to 5, please state the number that best represents the severity (how much it bothered you) of the difficulty to:
Chart: _____			
ACTIVITIES	0 - No 1 - Yes	0 - Not once 1 - Less than once/month 2 - Once or twice/month 3 - Once or twice/week 4 - 3 or 4 times/week 5 - Every day or almost every day	Where the number 1 represents ‘small effect’ and 5 represents ‘huge effect’  1-2-3-4-5
EAT AND TASTE FOOD			
SPEAK AND PRONUNCIATE CLEARLY			
WASH/CLEAN YOUR TEETH			
SLEEP AND REST			
SMILE, LAUGH AND SHOW YOUR TEETH WITHOUT EMBARRASSMENT			
MAINTAIN THE USUAL EMOTIONAL STATE			
PERFORM YOUR PROFESSIONAL OR SOCIAL ACTIVITY			
ENJOY CONTACT WITH PEOPLE			

\* Final score corresponds to the sum of the scores for each activity, obtained by multiplying the 3 assessed factors. Therefore, ranging from 0 to 200 (8x5x5).

Results and Interpretations

Of the 41 patients studied, 26 (63.4%) used oral mucosa grafts. The period between surgery and questionnaire submission ranged from 3 to 57 months. Six patients reported difficulty in performing some of the activities mentioned in the questionnaire. The final score of oral health-related quality of life ranged from 0 to 76 points, the main complaints being: difficulty in eating, speaking or smiling. The evolutionary analysis of the scores throughout the postoperative period showed a gradual reduction of symptoms over the months and no significant difference between the groups at the 12th postoperative month.

Despite generally painless tissue repair at the donor site (cheek, lip, or tongue), potential long-term complications remain inadequately studied, including permanent oral changes and discomfort. Reports on oral morbidity post-urethroplasty reveal varying rates of complications, from intraoral bleeding to sensory alterations, with incidences up to 8.3%. However, most complications are infrequent and tend to improve over time, albeit with exceptions such as altered eating habits and loss of sensitivity near the donor site.

The results were consistent with findings from previous studies, which showed a progressive improvement in oral symptoms during patients’ medical follow-ups [2,3]. Studies on oral quality of life post-urethroplasty are scarce, necessitating further research for comprehensive assessment and improved patient care. Although this study underscores the safety of oral mucosa grafts in correcting urethral stenosis, methodological limitations such as sample size and retrospective design warrant cautious interpretation of findings.

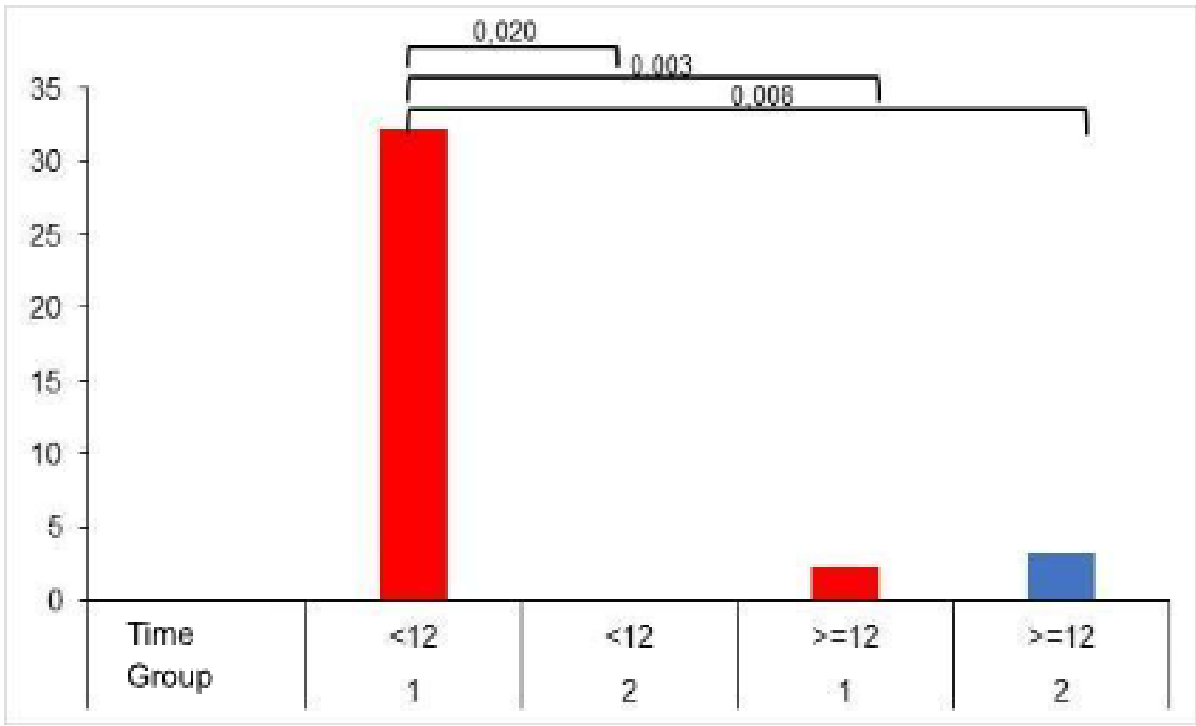


Fig. 2. Mean OIDP scores of patients in group 1 (with graft) in the first 12 months compared with the mean of both groups after 12 months and with group 2 in the first 12 months. p<0.05: statistical significance; Test used: Two-way Analysis of Variance (ANOVA)

Conclusions

The findings of this study demonstrate that the use of oral mucosa grafts in urethroplasties is a safe technique, and that it is not accompanied by sequelae that bring about a significant impact on the oral quality of life. It is known that from the 12th month after the surgery there is no difference in oral quality of life between patients who used oral mucosa graft and those who did not.

References

1) Godinho GF et al. Validação do Oral Impacts on Daily Performances para a população portuguesa. Ciência & Saúde Coletiva. 2018; 23 (12): 4351-4360  
2) Akyuz M et al. Evaluation of intraoral complications of buccal mucosa graft in augmentation urethroplasty. Turkish Journal of Urology. 2014. DOI: 10.5152/tud.2014.46343  
3) Jang TL, Erickson B, Medendorp A, Gonzalez CM. Comparison of donor site intraoral morbidity after mucosal graft harvesting for urethral reconstruction. Adult Urology. 2005. DOI: 10.1016/j.urology.2005.04.045