

# Outcome of Buccal Mucosal Graft Urethroplasty In Sharg Alneel and Alkwaaty Hospitals

Ibrahim A1, Fadlelsesd M2, Hamid K3, Hegazi A2, Mohammed A2, Tageldin A2  
1. University Of Khartoum, 2. Sudan Medical Specialization Board, 3. Omdurman Islamic Uninersity

## ABSTRACT

In Sudan there is a lot of cases of complex anterior urethral stricture ,in the past management by several procedure (dilatation and VIU) but now a day's BMG is the first option to manage complex anterior urethral stricture. There are no published local studies addressing this subjects. Hence the aim of this study to provide local data of the outcome of BMG urethroplasty in Sharg Elneel hospital and to improve quality of life.

## METHODS

Descriptive Cross-sectional hospital-based study, performed in Sharg Alneel and Alkwaity hospitals included all patients who diagnosed with anterior urethral stricture in Sharg Alneel hospital urology center from 2014 up to 2021.data was collected using check list, then data entered and analysis by using SPSS software program (vs24) giving the following result.

## RESULTS

Seventy one patients of urethral stricture were included in this study, out of total 38(53.5%) were within age group 20-40 years old, and 33(46.5%) within age group >40 years old. Regarding marital status, majority of patients 51(71.8%) were married, The time of operation was more than two hours in 64(90.1%), Among our patients the causes of stricture were infection 45(63.4%), instrumental 7(9.9%), trauma7(9.9%), Balanitis xerotica obliterans (BXO) 7(9.9%), and idiopatic 5(7%). The length of stricture in 35(49.3%) was 3-4 cm, and in 35(49.3%) was more than 4cm, Common sit of stricture was bulbopenile urethra 31(43.7%), followed by bulber 25(35.2%), and panurethral stricture 13(18.3%), and only 2(2.8%) were in penile, the commonest type of urethroplasty was Russell technique 35(49.3%), followed by Augmentation 20(28.2%), thus the success rate was 91.5%. Among patients 30(42.3%) of patients develop donor site complications.(the commonest complication was pain 23(32.4%), followed by swelling 4(5.6%), contracture 3(4.2%), and loss of sensation 1(1.4%)

## CONCLUSIONS

The commonest cause of stricture was infection followed by instrumental, trauma, balanitis xerotica obliterans (BXO), and idiopatic. - The length of stricture in commonly was 3-4 cm, and more than 4cm, - Common sit of stricture was bulbopenile urethra stricture 31(43.7%), followed by bulber25(35.2%), then panurethral stricture 13(18.3%), and only 2(2.8%) were in penile, - Type of urethroplasty: the commonest type of urethroplasty was Russell technique, followed by Augmentation, Double face BMG, and Stage BMG6 - At one year, the outcome as fellow 65(91.5%) of patients was satisfactory, 6(8.5%) was reported recurrent. - 40.8% of patients had previous history of urethral stricture. - Among patients, 30(42.3%) of patients develop complications.(the commonest donor site complication was pain, followed by swelling, contracture, and loss of sensation 1(1.4%)), - The successful rate after 12 months was as follow: Augmentation 95%, Russell technique 88.6%, flap and graft 100%, double face BMG 87.5%, stage BMG was 100%, and Kullkarni procedure was 100%. - Success rate was 100% in penile restructure, 96% in bulbar strictures, 92.3% panurethral stricture, and 87.1% in bulbopenile urethra stricture. - While the overall success rate was 91.5%

## REFERENCES

1. Selim M, Salem S, Elsherif E, Badawy A, Elshazely M, Gawish M. Outcome of staged buccal mucosal graft for repair of long segment anterior urethral stricture. BMC urology. 2019 Dec;19(1):1-8.  
2. Ratnakar A, Sharda S. A comprehensive study on buccal mucosal graft urethroplasty: 10 years single surgical unit experience. International Journal of Research in Medical Sciences. 2014 Jul;2(3):1011.  
3. Pariser JJ, Cohn JA, Gottlieb LJ, Bales GT. Buccal mucosal graft urethroplasty for the treatment of urethral stricture in the neophallus. Urology. 2015 Apr 1;85(4):927-31.