



Our Experience With Buccal Mucosa Graft Onlay Urethroplasty

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Abstract

Buccal mucosa graft (BMG) was first described for urethral reconstruction by Humby in 1941.[1] It has become an ideal urethral substitute because of ease of harvest, surgical handling characteristics, hairlessness, compatibility in a wet environment, and its early in-growth and graft survival. Because of these unique characteristics, buccal mucosa has endeared itself to the realm of reconstructive urology. Standard bulbar urethroplasties using buccal grafts should have a lifetime success rate approaching 92%.

Keywords: NIL

Introduction

For stricture urethras > 2cm, long term results of endoscopic urethrotomies are poor.

Urethroplasties using various tissues like buccal mucosa, penile skin, post auricular skin, bladder mucosa are used.

Urethroplasties using buccal mucosa have given 92-95% results over long term.

Aims And Objectives Of The Study

1. To evaluate the efficacy of buccal mucosa onlay urethroplasty in treating long length urethral strictures.
2. To define demographic features of patients with urethral strictures among population.
3. To determine the causes, modes of presentation and investigations carried out for urethral stricture.
4. To determine the complications and outcomes of buccal mucosal graft onlay urethroplasty.

Materials And Methods-

1. IT IS A OBSERVATIONAL STUDY FROM JANUARY 2018-JULY 2023

2. A TOTAL OF 30 PATIENTS WERE INCLUDED IN THE STUDY

Inclusion Criteria:

1. STRICTURES >2CM IN LENGTH
2. PATIENTS REQUIRING REPEATED INTERNAL URETHROTOMIES OR DILATATIONS PATIENTS WITH HEALTHY BUCCAL MUCOSA

Exclusion Criteria:

1. URETHROCUTANEOUS FISTULAS
2. SCARRED PERINEUM
3. PERIURETHRAL PHLEGMON

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A detailed history was taken of all the patients which included duration of disease, history of previous catheterization, trauma, previous urological surgeries, UTI, tobacco use.

For diagnosis of stricture urethra, all patients underwent uroflowmetry and Retrograde urethrogram (RGU) and Micturating cystourethrogram (MCU), USG abdomen and pelvis with post void residue as a part of diagnostic workup.

All patients underwent routine blood and required investigations as a part of pre-operative workup

Pre operative workup included careful general physical examination, palpation of anterior urethra for any mass, glans penis for signs of meatal stenosis or BXO.

Perineum was inspected for presence of fistulas or inflammation.

Oral cavity was examined to rule out leuloplakia .

17 patients underwent or already had suprapubic urinary diversion for urinary rentention, drainage and for subsiding infection.

Buccal mucosa dorsal onlay urethroplasty done in all cases.

Midline perineal incision taken, urethra dissected unilaterally on left side and lifted up from the underlying cavernosal body.

Urethra opened in midline dorsally at stricture site 5mm-1cm beyond it on both sides. A patch of buccal mucosa placed and wound closed in layers.

All patients were operated under GA, two teams operating operating simultaneously in oral cavity and perineum.

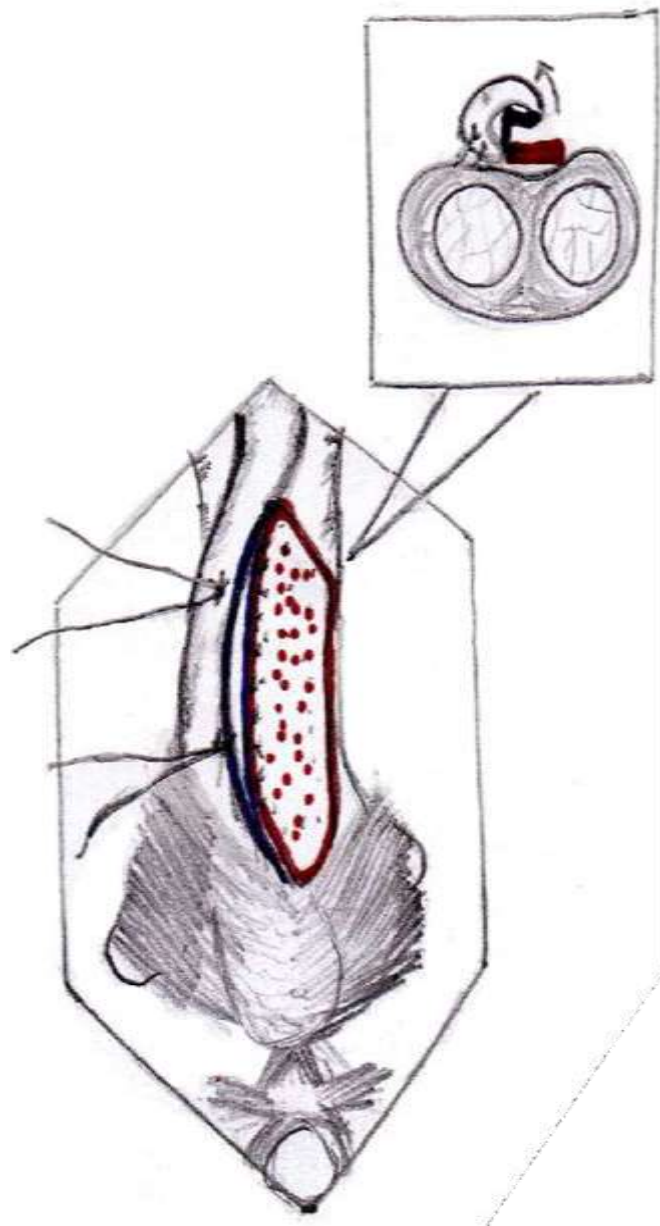
All patients underwent urethroscopy to evaluate urethra, location of stricture, length of sticture, spongiofibrosis.

Appropriate antibiotics were given post operatively and per urethral catheters were removed 4 weeks post operatively.

Results

Age Distribution

AGE GROUP(YEARS)	NO OF PATIENTS
20-30	5
31-40	9
41-50	3
51-60	1
61-70	9
>70	3



Etiology Of Stricture

ETIOLOGY	NO OF CASES
INFLAMMATORY	23
IDIOPATHIC	07

Length Of The Stricture

LENGTHOF THE STRICUTRE	NO OF CASES
2-6 CMS	22
6-10 CMS	08

Pre Operartive Uroflowmetry

VOIDED VOLUME < 180ML	8
PEAK FLOW RATE < 6ML/SEC	14
AVG FLOW RATE <2.4 ML/SEC	16

Post Operative Uroflowmetry

VOIDED VOLUME >180ML	26
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PEAK FLOW RATE > 12ML/SEC	23
AVG FLOW RATE > 6 ML/SEC	07

Complications

COMPLICATION	NO OF CASES
SSI	6
RE -STRICTURE	3
EPIDIDYMORCHITIS	2
PERI CATHETER LEAK	3

1. MEAN DURATION OF STAY WAS 4 DAYS.
2. MEAN DURATION OF SURGERY-2.30 HOURS
3. NO DRAINS PLACED

Conclusion:

1. Buccal mucosa graft has good graft properties for graft survival with minimal donor site morbidity.
2. Dorsal onlay graft is the preferred form of graft placement.
3. Owing to less failure rate it can be offered as an alternative to staged urethroplasty for long urethral stricture.



