

# Use Of Bladder Mucosal Graft In Repair Of Hypospadias Crippled: Report Of 2 Cases

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## Abstract

## INTRODUCTION

The term "Hypospadias Crippled" is defined as recurrent hypospadias after multiple surgeries with significant penile deformity and unavailability of sufficient penile skin for subsequent repair.

## PATIENTS AND METHODS

We are reporting two cases of "Hypospadias Crippled" presented to the department of Urology at Pakistan Institute of Medical Sciences (PIMS) Islamabad. The mean age of the patients was 18.2 years with both having the past history of multiple failed attempts of hypospadias repair starting from childhood till adolescence.

Both patients were subjected to free bladder mucosal graft urethroplasty. The operative and postoperative data was recorded. No patients have lost to the follow up for last one year.

## OPERATIVE TECHNIQUE

Steps of operation are shown as follows.

**Figure 1**



*Fig: 1 The patient with hypospadias crippled.*



*Fig: 2 The dissection and excision of scarred urethra.*



*Fig: 3 The bladder opened and stay sutures applied.*



*Fig: 4 The graft has been harvested.*



*Fig: 5 The graft has been tubularized on Foley catheter.*



*Fig: 6 Urethroplasty in progress.*



*Fig: 7 Bladder mucosal graft urethroplasty has been completed.*



*Fig: 8 Ventral skin closed over neo-urethra.*

## **RESULTS**

The mean operative time was 3.4 hours with average blood loss of 120 ml. The mean hospital stay of both of the patients was 10 days. Both patients had successful operation and mucosal grafts provided excellent functional and cosmetic results. There has been no recurrence of fistula for last one year.

## **DISCUSSION**

Hypospadias crippled is recognized complication of hypospadias surgery and it is very difficult to treat. The ideal tissue for complex hypospadias repair has yet to be found. The exact prevalence of the disease is not known, but the best available estimate suggests that this crippling deformity occurs in 5-7% of patients<sup>1,2</sup> after multiple failed attempts of repair. The disease is very challenging to treat. Currently, the common available options are buccal mucosal and bladder mucosal grafts urethroplasty<sup>3, 4</sup>. Both the modalities give satisfactory functional and cosmetic results without significant postoperative complications<sup>5</sup>. Buccal mucosa is a preferred by some authors because of less complications as compared to bladder mucosa.<sup>6,7</sup> Use of bladder mucosa in

our 2 cases have shown very good results.

## **CONCLUSION**

Our initial results showed that bladder mucosal grafts are associated with satisfactory results and it could be used successfully for urethral reconstruction.

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