

# ANALYSIS OF PATIENTS WITH BLADDER DYSFUNCTION AND RENAL TRANSPLANTATION: A SINGLE CENTER EXPERIENCE

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## INTRODUCTION

- Patients with neurogenic bladder dysfunction are at high risk of suffering chronic kidney disease (CKD).<sup>1</sup>
- Even today, 26% of patients with mielomeningocele who do not undergo urological treatment develop renal damage. CKD is one of the most common causes of death in these patients.<sup>2</sup>
- The urological approach in this type of patients is complex and requires a multidisciplinary experienced team.<sup>3</sup>

## OBJECTIVE & METHODS

- The main objective was to evaluate the outcomes of transplanted patients with neurogenic voiding dysfunction depending on the approach in the bladder treatment in a tertiary hospital
- 16 patients with neurogenic bladder were transplanted between 1990 and 2016
- We analyzed patient characteristics, urodynamic evaluation previous to renal transplant, surgical procedure, complications and allograft survival. Two groups were performed depending on urinary diversion: orthotopic (bladder preservation) or heterotopic (ileal conduit)

### ILEAL CONDUIT

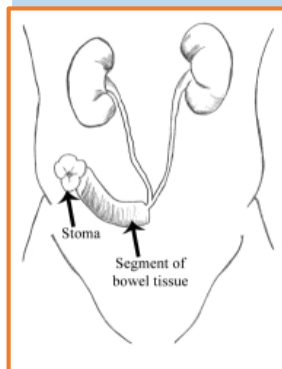
N = 10

TABLE 1: Cause of neurogenic bladder dysfunction

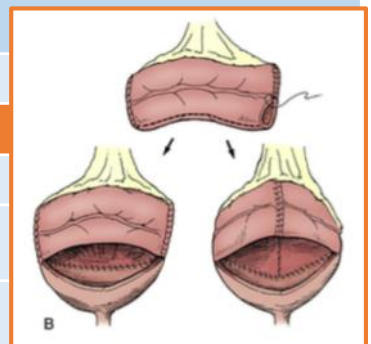
### BLADDER PRESERVATION (2 VESICAL AMPLIATION)

N = 6

#### SUBJACENT PATHOLOGY



7	MIELOMENINGOCELE	3
3	MICROBLADDER POST-TUBERCULOSIS	3
<b>PREVIOUS MICTIONAL SITUATION</b>		
9	CRÉDÉ	0
1	TOTALLY INCONTINENT/ESPINCTEROTOMY	3
0	SELF-CATHETERIZATION	3



#### PREVIOUS URODYNAMICS

OBSTRUCTION + SPHINCTER DYSSINERGIA

LOW COMPLIANCE BLADDER

TABLE 2: results after transplantation

ILEAL CONDUIT	RESULTS	BLADDER PRESERVATION
8 years (2 still functioning)	MEDIAN GRAFT SURVIVAL (Y)	4 years (4 still functioning)
<b>CAUSE OF LOSS</b>		
2	SURGICAL (ACCUTE)	0
4	INFECTION	1
1	OBSTRUCTIVE	1
1	CHRONIC REJECTION	0
2	NUMBER OF RETRANSPLANTS	0

## CONCLUSIONS

- In patients unsuitable for self-catheterization or bladder augmentation, an ileal conduit can offer a valid alternative with good graft survival and acceptable percentage of complications.
- Potential transplant recipients must be classified according to pathophysiological and anatomical abnormalities of the urinary tract.
- This surgical management allows to include all these patients as potential kidney transplant recipients.

## BIBLIOGRAPHY

<sup>1</sup>Podnar, S.; Lower urinary tract dysfunction in patients with peripheral nervous system lesions. Handb Clin Neurol, 2015;130: 203.

<sup>2</sup>Schafhauser W.; Kidney transplantation in patients with anomalies of the lower urinary tract Urologe A. 1994 Sep;33(5):401-14

<sup>3</sup>Basiri A.; Renal transplant in patients with spinal cord injuries. Exp Clin Transplant. 2009 Mar;7(1):28-32.

DISCLOSURES: NONE