

Robotic ureteric reimplantation for benign disease in a tertiary UK centre: safe and effective

<u>M. Spazzapan, S. Folkard</u>, M. Gad, H. Sharples, I. Chapman, C. Clark, S. Khan, R. Nair, S. Malde, A. Sahai *Urology Department, Guy's and St Thomas NHS Foundation Trust, London, United Kingdom*

Introduction

Robotic ureteric reimplantation has small patient numbers reported in the worldwide literature. The underlying aetiology is heterogenous and there is limited evidence on outcomes and optimum follow-up. We report our experience of benign robotic ureteric reimplantation in the largest reported series.

Methods

- Retrospective review of prospectively maintained database
- 67 consecutive patients undergoing benign robotic ureteric reimplantation between 2015 and 2023
- Review of electronic patient records
- Statistical analysis on R
- No ethical approval required (UKRI tool used)

Aims

Results and interpretation

Aetiology	Number	Length of stay (median)
Urological	36	2
Stricture	23	
Diverticulectomy	5	
Redo reimplant	2	
Gynaecological	30	3
Injury	27	
Planned excision	3	
Colorectal	1	6
Total (%)	67	2 days



Primary outcome measures

- No evidence of radiological obstruction post-ureteric reimplantation
- Remaining free of stents or nephrostomies following surgery

Secondary outcome measures

- Post-operative complications
- Change in postoperative renal function
- Length of stay





Primary outcome measures

- 2 (3%) patients showed some dilatation on follow-up imaging
 - One had a re-do reimplant and the other has not required intervention
- All patients free of stents or nephrostomies

Secondary outcome measures

- Complications
 - 1 unplanned conversion to open
 - 11 Clavien II complications
- No significant deterioration in renal function in the follow-up period, with an average change in creatine of -2mmol/L (±12.5 mmol/l, p=0.07)
- Median length of stay 2 days
- 3 monthly imaging (CT IVU) + 12 monthly MAG-3 renograms to capture problems in the nonradiotherapy population

Conclusions

• Robotic ureteric reimplantation is a safe procedure with high success rate and low complication rates.

Demographics

- N=67
- Gender
 - 40 females
 - 27 males
- Type of reconstruction
 - 6 Boari flap
 - 5 psoas hitch + ureteric reimplantation
 - 56 reimplantations
- 84% (56) distal ureteric reconstruction

- Recommended follow up protocol
 - CT Urogram at 3 months
 - MAG-3 renogram at 12 months
 - Discharge if good drainage
- More careful monitoring beyond 12 months may be required in those undergoing reconstruction for the development of sequelae of radiotherapy.

References

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