

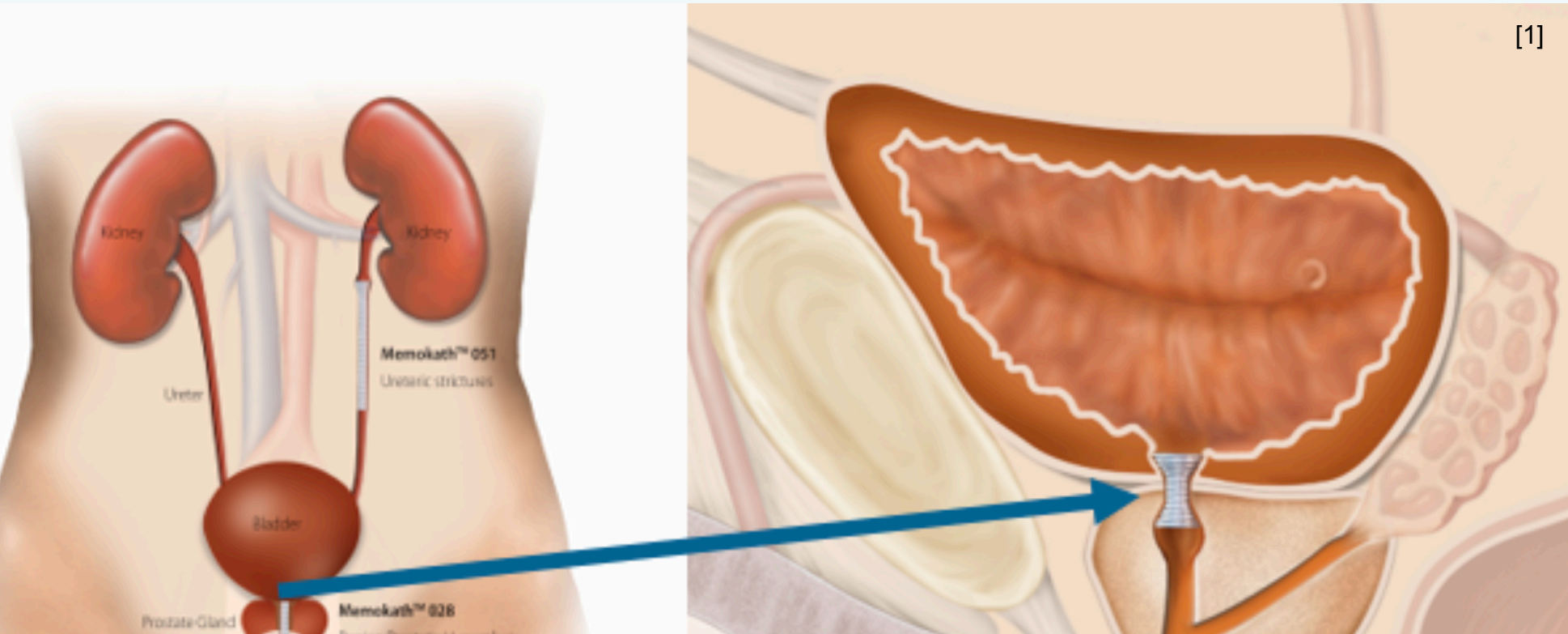
# Management of Intractable Bladder Neck Strictures Following Radical Prostatectomy

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## INTRODUCTION

The incidence of Vesicourethral Anastomotic Stenosis (VUAS) post radical prostatectomy varies from 1% to 26%<sup>[2,3,4,5]</sup>. Current treatment can be challenging and includes a variety of different procedures. These range from endoscopic dilations, to bladder neck reconstruction to urinary diversion. We investigated a 2-stage endoscopic treatment, using the thermo-expandable Memokath®045 bladder neck stent to manage patients with VUAS post radical prostatectomy.



## METHODOLOGY

All patients had two previous attempts at endoscopic dilatation with or without incision and a trial of clean intermittent catheterisation. During the 1<sup>st</sup> stage, the bladder neck stricture is dilated to 30Fr, the stricture length is measured, and a catheter is left in-situ. One to two weeks later, post haemostasis and healing, an appropriately sized Memokath®045 stent is inserted. The stent is then removed 1-year post-op.

**N = 30**   **12 Months Min. F/U**   **3.6 Years Mean F/U**

### Stage 1:

- Endoscopic Dilation (30F) +/- Incision
- Measure Length
- Catheterisation

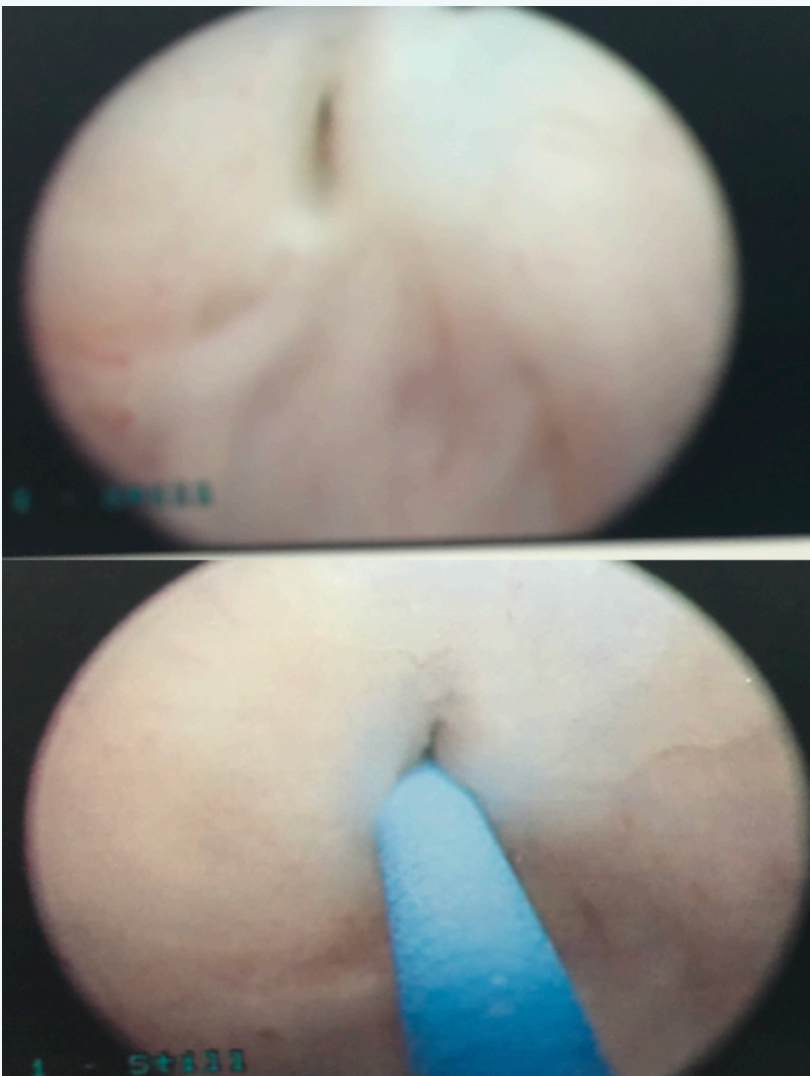
1-2 Weeks

### Stage 2:

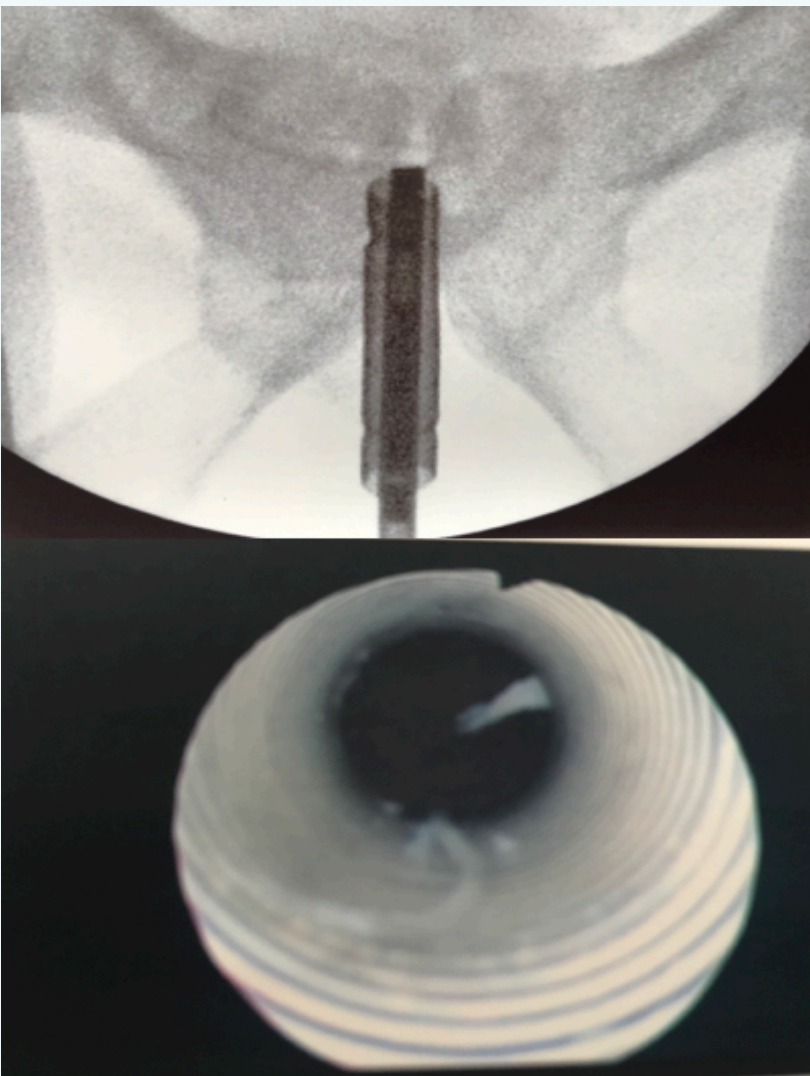
- Re-Measure Width and Length
- Memokath™ Inserted (Fluoroscopy)

1 Year

Memokath™ Removal



Stage 1



Stage 2

## RESULTS

Our series of patients had a median age of 62 (54-72). Most patients (26) had a robot assisted radical prostatectomy (RARP) or salvage procedure. The mean interval time between prostatectomy and Memokath®045 stent insertion was 13 months. The mean follow-up time was 3.6 years with all patients having a minimum of 12 months follow-up. Results showed improvement in IPSS scores, IPSS quality of life scores, Qmax and PVR after the Memokath®045 stent was removed compared to pre-operation. With a minimum 12 months post stent removal, 93% of patients were fully continent, whilst 7% of patients were socially continent. 2 (7%) patients had their stents removed and not replaced due to re-strictureing and stone formation.

**IPSS: 28 (pre-insertion) → 10 (post-removal)**

Flow Rate (Mean)			
Q Max (mls/sec)		Residual Volume (mls)	
Pre-Insertion	Post-Removal	Pre-Insertion	Post-Removal
6	14	176	22

Continence			
	Fully Continent	1-2 pads / day (Social)	>2 pads / day
No. of Patients (%)	26 (93%)	2 (7%)	0

Type of Complication			
	Overlapping Sphincter / Migration	Dysuria / Ejaculatory Pain	Temporary Urge Incontinence
No. of Patients (%)	3 (10%)	4 (14%)	2 (7%)
Treatment	Re-Operation + Replacement	Analgesia	Anticholinergics

**100%**  
**Continence Rate**  
(Social or Full)

**93%**  
**Stent Success Rate**

## DISCUSSION

Overall, the Memokath®045 stent was successful in treating 93% of patients with VUAS. Our series had minimal complications that were managed with conservative measures and in only 3 patients' re-operation was needed. 2 patients had their stent removed and not replaced. However, no urinary tract infections, stricture recurrence or urinary retention was observed in the rest of the cohort (93%).

## CONCLUSION

In conclusion, the Memokath®045 stent is less invasive than other techniques such as bladder neck reconstruction and urinary diversion and provides superior patency results<sup>[6,7,8]</sup>. Therefore, this management option should be considered in the management of VUAS.



### References

1. <http://www.pnnmedical.com/memokath/solutions/memokath-045-bladder-neck> 2.Elliott SP, Meng MV, Elkin EP, et al. Incidence of urethral stricture after primary treatment for prostate cancer: data from CaPSURE. J Urol 2007; 178: 529-534 3.Breyer BN, Davis CB, Cowan JE, Kane CJ, Carroll PR. Incidence of bladder neck contracture after robot-assisted laparoscopic and open radical prostatectomy. BJU Int 2010; 106: 1734-1738 4.Jarosek SL, Virnig BA, Chu H, Elliott SP. Propensity-weighted Long-term risk of urinary adverse events after prostate cancer surgery, radiation or both Eur Urol 2015; 67: 273-280 5.Ward JF, Sebo TJ, Blute ML, Zincke H. Salvage surgery for radio-recurrent prostate cancer: contemporary outcomes. J Urol 2005; 173(4): 1156-60 6.Brede C, Angermeier K, Wood H. Urology 2014;83(3):648-52 7.Ishii G, Kasai K, et al. BMC Urol 2015;56(1): 96-100 8.Platzgraf D, Beuke M, Isbarn H, et al. J Urol.2011; 186(5):1944-7