



# Experience of REZUM as a Day Case Procedure in PMH

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## Objectives:

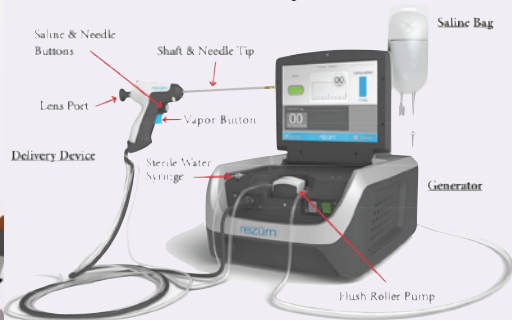
- ▶ To summarise the experience of Rezum in a single regional Urology centre
- ▶ To evaluate the feasibility and safety of Rezum as a day case procedure

## Introduction:

- ▶ Benign prostate hyperplasia (BPH) is one of the most common presenting urological complaints affecting more than 40% of men in their 50s.<sup>1</sup>
- ▶ The resulting lower urinary tract symptoms (LUTS) pose significant impact on patients' quality of life.
- ▶ Patient with refractory symptoms despite medical treatment or complications from BPH could be considered for surgical intervention.
- ▶ Transurethral resection of prostate (TURP) is a gold standard intervention but carries a relatively high complication rate and mean hospital stay of 2 to 3 days.<sup>2</sup>
- ▶ Transurethral Water Vapour Therapy (Rezum) is a novel minimally invasive technology for treatment of BPH.

## Rezum:

- ▶ Convective water vapour energy using radiofrequency (RF) energy
- ▶ The system comprises of a RF generator and a single-use sterile transurethral delivery device



(Figure 1: component of REZUM system<sup>3</sup>)



(Figure 2: cystoscopic view of REZUM)

## Patients and Methods:

- ▶ A total of 70 patients with moderately enlarged prostate (30–80cc) underwent Rezum with LA and IV sedation from 2/2022 to 8/2022 in PMH
- ▶ Age ranged from 52–92 (average 73.6)
- ▶ Most of them had multiple comorbidities with an average Charlson comorbidity score 5
- ▶ 32.9% of them were on antiplatelet or anticoagulant
- ▶ Average prostate size was  $53.4 \pm 15.1$  cc
- ▶ 35.7% of them had median prostate lobe

Indication	Bothersome LUTS	Refractory retention	Obstructive uropathy
Number (%)	11 (15.7%)	40 (57.1%)	19 (27.1%)

- ▶ 84.3% of them were catheter-dependent
- ▶ Average pre-procedure IPSS and IPSS-QOL were 18.7 and 3.68 respectively

## Results:

- ▶ OT duration:  $20.9 \pm 7.8$  mins
- ▶ Same day discharge rate was 84% (59 over 70)



- \* 5 for patient's preference
- \* 3 were on antiplatelet/ anticoagulant requiring over-night observation
- \* 1 had hyponatraemia
- \* 1 had hypotension responsive to fluid replacement
- \* 1 needed pre-operative IV antibiotics

- ▶ 30-day re-admission rate was 4.3% (3 over 70)
- \* Due to haematuria on Foley, slipped Foley and blocked Foley respectively

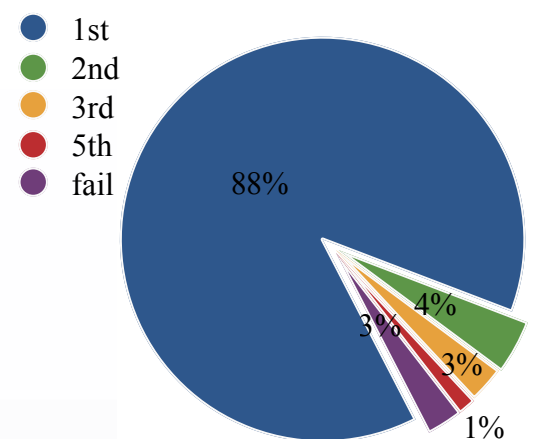
## Complications:

- \* 0 intra-op complication
- \* 2.9% (2 over 70) had urinary tract infection
- \* 0 de-novo sexual dysfunction

## TWOC

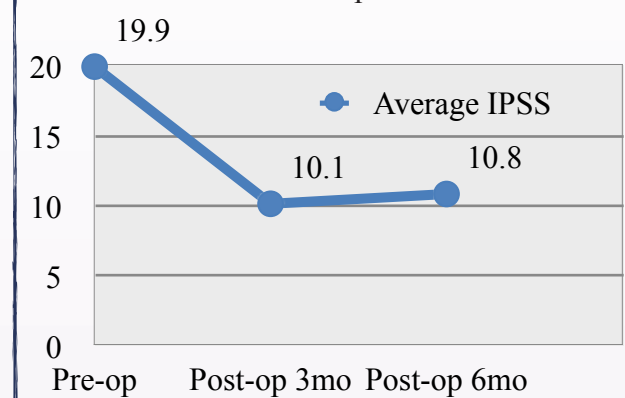
- \* Overall success rate 97.1% (67 out of 69) (1 patient passed away due to pneumonia before TWOC)
- \* 88.4% (61 out of 69) were successful on their first attempt of TWOC
- \* 3 patients required 2<sup>nd</sup> attempts
- \* 2 patients required 3<sup>rd</sup> attempts
- \* 1 patient required 5<sup>th</sup> attempts
- \* 1 patient failed to wean off catheter despite 5<sup>th</sup> attempts eventually requires long term catheter
- \* 1 patient failed 3<sup>rd</sup> attempts await further trials

## Numbers of attempts required for TWOC



- ▶ Among the 42 patients due for 3-month follow-up and 22 patients due for 6-month follow-up:

\* IPSS-QOL reduced 49.2% at 3-month and 45.7% at 6-month compared to baseline



\* IPSS-QOL reduced 50% at 3-month and 38.9% at 6-month

## Conclusions and future works:

- ▶ Our centre has demonstrated Rezum as an effective day case procedure for patients with moderately enlarged prostate from bothersome LUTS to catheter dependency
- ▶ Long term follow-ups are required to evaluate the durability of treatment effect and safety profile
- ▶ Use of Rezum on larger size prostate is promising in literatures<sup>4</sup> but requires more local study to establish applicability in our locality

## References:

1. Vuichoud, C., & Loughlin, K. R. (2015). Benign prostatic hyperplasia: epidemiology, economics and evaluation. *The Canadian journal of urology*, 22 Suppl 1, 1–6.
2. Gravas S., et al. (2022). EAU Guidelines on the management of non-neurogenic male lower urinary tract symptoms (LUTS), incl. benign prostatic obstruction (BPO). *European Association of Urology*.
3. Arezki, A., et al. (2020). Reasons to go for Rezūm Steam therapy: An effective and durable outpatient minimally invasive procedure. *World Journal of Urology*, 39(7), 2307–2313.
4. Garden, E. B., et al. (2021). Rezum therapy for patients with large prostates ( $\geq 80$  g): initial clinical experience and postoperative outcomes. *World journal of urology*, 39(8), 3041–3048.

## Disclosure:

The authors declared no conflict of interest.

