



# Transurethral Water Vapour Therapy (Rezūm) for Acute Urinary Retention with Obstructive Uropathy

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## Objective

To investigate the safety and efficacy of Transurethral Water Vapour Therapy (Rezūm), for acute urinary retention complicated by obstructive uropathy.

## Patients and Methods

This was a prospective cohort study of Rezūm for obstructive uropathy. Rezūm was performed under pure local anaesthesia. Serum creatinine was monitored perioperatively. The primary outcome was the proportion of patients who were catheter-free at 3 months follow up, with serum creatinine NOT exceeding +0.3mg/dL or 1.5 times the baseline (in line with the KDIGO definition of acute kidney injury).

## Results

20 consecutive patients with obstructive uropathy were recruited from 2023 to 2024. Median age was 71 years (interquartile range: 66 - 78 years).

95% of men (19 out of 20) had successful TWOC while fulfilling the serum creatinine requirement. Median catheter time was 33 days (27 - 42 days). At 3 months, there was no recurrent retention. The median prostate size dropped from 57.8 ml (46.4-69.0ml) to 35.6 ml (26.5-48.5ml) ( $p < 0.001$ ). The median Qmax was 10.3 ml/s (6.7–16.7 ml/s) with voided volume of 195 ml (101-290 ml) and residual urine of 80 ml (60–143 ml).

## Conclusion

Rezūm is safe and effective for obstructive uropathy.

**Table 1** Serum Creatinine Level During Study Follow-up  
Abbreviations: IQR, Interquartile range; TWOC, Trial Without Catheter

Parameter	Creatinine level
Median (IQR) worst serum creatinine level during the index episode of retention ( $\mu\text{mol/L}$ )	319 (216-728)
Median (IQR) baseline serum creatinine with urethral catheter in-situ ( $\mu\text{mol/L}$ )	101 (97-127)
Median (IQR) serum creatinine 2 weeks after successful TWOC postoperatively ( $\mu\text{mol/L}$ )	107 (81-124)
Median (IQR) serum creatinine at 3 months ( $\mu\text{mol/L}$ )	99 (79-113)

**Table 2** Early Outcome During Study Follow-up  
Abbreviations: TWOC, Trial Without Catheter

Outcome	n=20
Catheter free rate by 4 weeks	5 (25%)
Catheter free rate by 6 weeks	15 (75%)
Catheter free rate by 3 months	19 (95%)
Failed TWOC	1 (5%)