

# Retrospective Analysis on the Safety and Innocuity of Monopolar Transurethral Resection of Prostate as Outpatient Day-Care Surgery

Marie-Pier St-Laurent, MD • Samuel Tremblay, MD  
Geneviève Nadeau, MD, MSc, FRCSC



CHU de Québec-Université Laval, Québec (Qc), Canada

## Introduction

- Newer technologies in the treatment of BPH are advocated to reduce complications and length of hospital stay compared to monopolar TURP.
- At our center, many patients have undergone mTURP as a day care surgery (DCS) in contrast to the usual post-operative hospitalisation (POH).

## Objectives

To assess the feasibility and safety of mTURP performed as a DCS, by comparing the 30-day complication rate among DCS and POH.

## Methods

Single institutional retrospective analysis of medical records of 628 mTURP performed for BPH between January 1<sup>st</sup> 2016 to March 31<sup>st</sup> 2018.

## Discussion

- Retrospective study, with inherent bias
- Same rates of complications with an outpatient procedure compared to what is reported in the literature on mTURP
- Patients in DCS had bladder catheter removed within 24-48h
- Reflects real-life practice in a teaching hospital
- Average of 70 yo patients with moderate comorbidities (>60% patients with ASA ≥ 2)

## Conclusion

**TURP using monopolar current can be safely performed as an outpatient day-care procedure for selected patients.**

In a cohort of patients, ranging from mild to severe comorbidities, and with a majority treated for chronic retention, no difference in the complication rate was found at 30 days between outpatient and inpatient procedure.

## Results

- 628 medical records
  - 362 mTURP included
    - 52% DCS (187/362)
    - 48% POH (175/362)
- Same complication rate: 22% of ER consultation at 30 days, 11% hematuria, 9% UTI, 10% acute retention
- Same readmission rate: 4.4%
- No death at 30 days

**Table 1: Patients demographics and major comorbidities, according to postoperative trajectories**

Patient characteristics	Total (%)	Day care surgery (DCS) (%)	Post-operative hospitalisation (POH) (%)	p-value <sup>1</sup>
Age (Mean - SD)	71.62 (SD: 9.48)	70.12 (SD 9.56)	73.23 (SD 9.16)	0.01
BMI (Mean - SD)	27.50 (SD: 4.70)	27.41 (SD: 4.77)	27.59 (SD: 4.63)	0.73
Preop bladder catheter or CIC	49.1	49.7	48.6	
American Society of Anaesthesiologists (ASA) score				0.05
	1	13.9	14.4	13.2
	2	64.5	69.0	59.8
	3	21.3	16.6	27.0
Coronary artery disease	22.9	19.8	26.3	0.14
Diabetes	22.1	17.6	26.9	0.03
OSAHS	11.9	11.2	12.6	0.69
Cognitive impairment	7.2	3.7	10.9	0.01
Surgery performed under Aspirin	12.7	12.8	12.6	0.94
A/C discontinued preop	8.5	3.7	13.7	0.01
Regional anaesthesia (spinal)	71.3	71.7	70.9	0.87

<sup>1</sup>: Based on a Pearson Chi Square Test

**A/C:** Anticoagulation **CIC:** Clean Intermittent Catheter **BMI:** Body Mass Index

**OSAHS:** Obstructive Sleep Apnea-Hypopnea Syndrome **SD:** Standard Deviation

**Table 2: Complication rate in 30 days postoperative overall and according to post-operative trajectory**

Type of Complication	All patients (362) N (%)	DCS (187) N (%)	POH (175) N (%)	p-value <sup>1</sup>
Consultation <sup>2</sup> in ER	79 (21.8)	41 (21.9)	38 (21.7)	1.00
Hematuria at ER consultation	41 (11.3)	21 (11.2)	20 (11.4)	0.93
AUR at ER consultation	35 (9.7)	14 (7.5)	21 (12)	0.16
Total UTI at 30 days PO	34 (9.4)	16 (8.6)	18 (10.3)	0.59
Need of 2 <sup>nd</sup> OR	8 (2.2)	0 (0)	8 (4.6)	0.00
Transfusion ( ≥1unit)	7 (1.9)	1 (0.5)	6 (3.4)	0.06
Readmission	16 (4.4)	8 (4.3)	8 (4.6)	1.00

<sup>1</sup>: Based on a Pearson Chi Square Test

<sup>2</sup>: 7 consultations (7.7%) for medical related issues (allergy, venous insufficiency, convulsion from cerebral metastasis, vagal syncope, dyspnea, adaptive disorder and constipation), 12 consultations (13.2%) for other urologic reasons (7 dysuria without infection, 2 bladder spasms, 1 scrotal cellulitis, 1 paraphimosis and 1 PO delirium)

**AUR:** Acute Urinary Retention **ER:** Emergency Room **OR:** Operating Room **PO:** Postoperative **UTI:** Urinary Tract Infection