

# MP22-08

## Impact of preoperative ureteral stenting on endoscopic findings: A propensity score matching analysis

**Shuzo Hamamoto**<sup>1,6</sup>, Shinsuke Okada<sup>2,6</sup>, Takaaki Inoue<sup>3,6</sup>, Tomoki Okada<sup>1</sup>, Ryosuke Chaya<sup>1</sup>, Kengo Kawase<sup>1</sup>, Kazumi Taguchi<sup>1</sup>, Atsushi Okada<sup>1</sup>, Hiroyasu Miura<sup>4</sup>, Tadashi Matsuda<sup>5</sup>, Takahiro Yasui<sup>1</sup>

1. Department of Nephro-Urology, Nagoya City University Graduate School of Medical Sciences
2. Department of Urology, Gyotoku General Hospital
3. Department of Urology, Hara Genitourinary Hospital
4. Department of Urology, Hachinohe Koyo clinic
5. Department of Urology, Kansai Medical University Medical Center
6. SMART Study Group, Japan



## Introduction and Objective:

- The ureteral stent placement before ureteroscopic lithotripsy (URSL) is reported to facilitate ureteroscopic management of urolithiasis.
  - However, there is no report evaluating the ureteroscopic findings before and after stent placement.
- ➔ In this study, we first examined the effect of the preoperative ureteral stenting on ureteroscopic findings and surgical outcome of URSL.

## Patients and Methods:

URSL **832** cases (Jan 2014 - Feb 2017)

### Excluded criteria

- Staged procedure
- Multiple calculi
- Medical history of URS and URSL
- pre-nephrostomy cases

Single upper tract urinary calculi (U1/U2)  
241 cases

Control  
185 cases

Pre-stenting  
56 cases

Propensity score matching (1:1)

Control (CN)  
48 cases

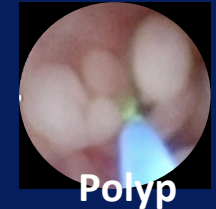
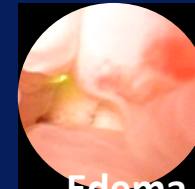
Pre-stenting (DJ)  
48 cases

### ■ Surgical outcomes

- Surgical time
- Stone free rate
- complication
- Postoperative fever

### ■ Ureteroscopic findings (UFs)

<SMART classification>

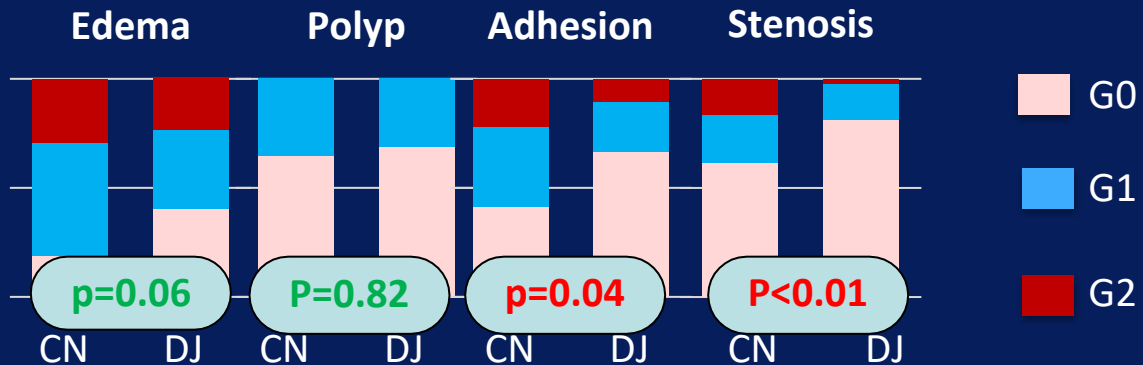


## Results:

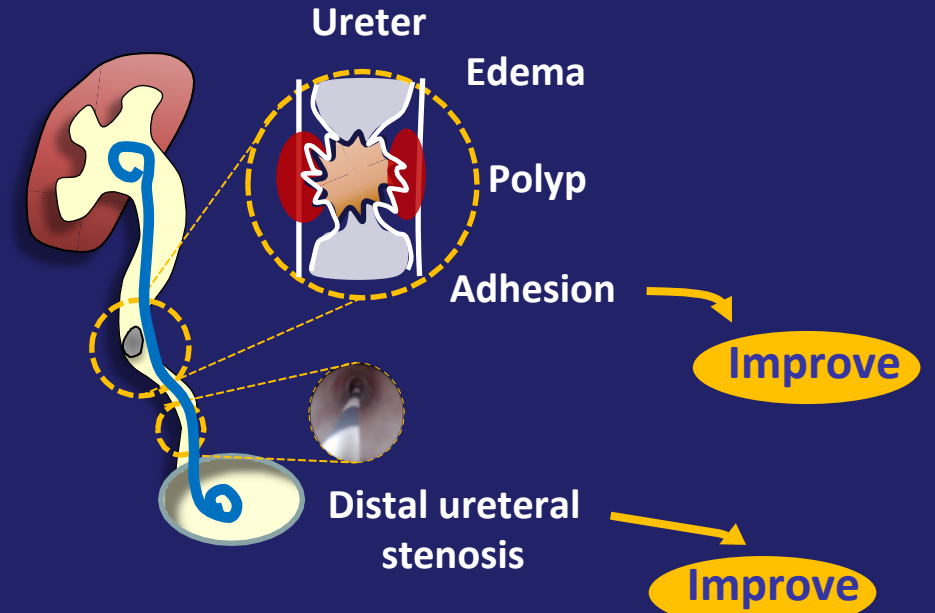
### 【Surgical outcomes】

	CN	DJ	p-value
N	48	48	
Surgical time	64.4 ± 37.8	60.8 ± 32.9	0.34
Stone free	38 (79.1)	45 (95.7)	0.07
Ureteral injury			0.19
G1(mucosa)	11 (22.9)	5 (10.4)	
G2(muscle)	4 (8.3)	2 (4.1)	
G3(fat)	2 (4.1)	1 (2.1)	
Post-op fever	1 (2.1)	3 (6.3)	0.62

### 【Effect of the preoperative DJ stenting on UFs)】



## Conclusions:



- Preoperative DJ placement is associated with better endoscopic findings of stone adhesion and distal ureteral stenosis.
- If severe stone impaction is expected, pre-stenting is one of the choices to perform an ideal URS operation.

