

# Effective, Non-Invasive Removal, Significantly Improving Patient Experience and Reducing Healthcare Burden.

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## THE COST-EFFECTIVENESS AND SAFETY OF MAGNETIC URETERAL STENTS: A PROSPECTIVE STUDY OF 40 PATIENTS IN ENDOUROLOGY

### Introduction

- **Problem:** Traditional Double-J (DJ) stents require a painful, second cystoscopic procedure for removal, leading to increased patient discomfort, costs, and procedural burden.
- **Solution:** Magnetic Ureteral Stents (MUS) enable non-invasive removal with an external magnet.
- **Hypothesis:** MUS can reduce OR time, healthcare costs, and patient discomfort to addit safet

### Removal Process Comparison



### Methods

**Design:** Prospective, single-center study.

**Setting:** Dubai Hospital, Jan 2022 - Dec 2023.

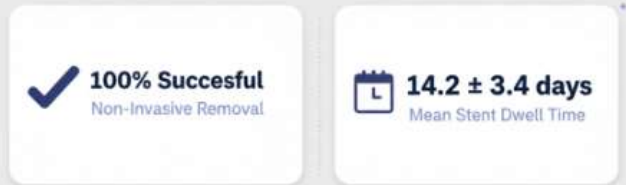
**Patients:** 40 patients requiring temporary ureteral stenting received MUS.

**Procedure:** MUS removed non-invasively using a magnetic retrieval device.

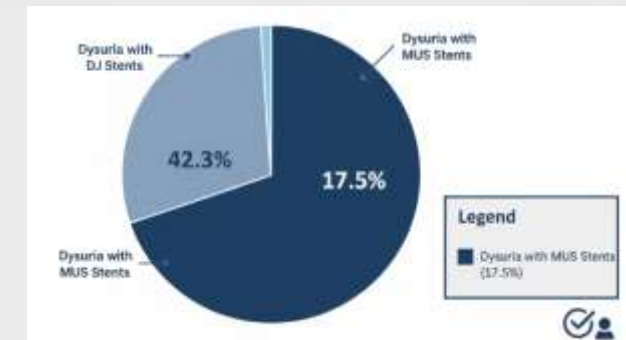
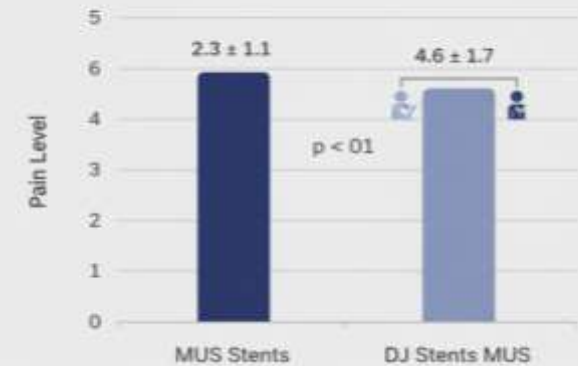
**Outcomes:** Removal success, pain scores (VAS), dysuria, complications, procedural time, cost-

## Results

### Successful Non-Invasive Removal



### Pain Scores (VAS)



**Conclusion:** MUS are a cost-effective, safe, and efficient alternative to DJ stents. Non-invasive removal eliminates the need for an additional cystoscopic procedure, reducing healthcare costs and patient burden. This innovation significantly improves patient experience and