

PREVALENCE AND RISK FACTORS FOR URINARY TRACT INFECTION UP TO ONE YEAR FOLLOWING MIDURETHRAL SLING INCONTINENCE SURGERY

Department of Obstetrics and Gynecology, Soroka University Medical Center,
Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheba,
Israel



Dorit Paz-Levy¹, David Yohay¹, Yonatan Reuven², Zehava Yohay¹,
Inbal Idan¹, Debi Elharar¹, Hannah Gliner¹, Adi Y. Weintraub¹



Introduction

One of the most common complications following Midurethral slings (MUS) placement is urinary tract infection (UTI).

Rates of UTI following surgery have been reported to be as high as 34% within the first three months and up to 50% after a year.

The wide range in reported rates of postoperative UTI may be attributed to different populations, different study designs and employment of different diagnostic criteria. The purpose of the current study is to investigate the prevalence and risk factors of UTI one year after MUS incontinence surgery.

Materials and Methods

- A **retrospective cohort study**.
- Study population comprised of all patients who underwent a MUS surgery between the **June 2013 and June 2015**.
- Data were retrieved from the **patients' medical records** (including demographic details, gynecological history, history of previous MUS or pelvic organ prolapse surgery, laboratory and urine culture results, and medical treatment)
- Data were analyzed using **descriptive statistics**.
- A **comparison** between patients **with and without a positive urine culture** up to one year following surgery was also performed.

Results

- 180 stress incontinence surgeries, of them **178** were **MUS**.
- Urine culture positive UTI** was noted in **21%** (38 patients) within the first year following surgery.
- The mean age and BMI of patients complicated with UTI was 64.8 and 29.1, respectively.
- Six patients had undergone a hysterectomy and one had a previous prolapse surgery.
- The most common pathogen found in urine culture was *E. coli* that accounted for 55%** of all UTIs.
- When comparing patients with and without UTI, **no significant difference was noted in the pre- and intra-operative characteristics**.
- Duration of hospitalization and the rate of readmissions** in the first year following surgery, **were significantly associated** with the **risk of recurrent UTI** ($p < 0.026$ and $p < 0.003$, respectively).

Conclusions

Approximately 1:5 women undergoing a MUS operation in our population will suffer from UTI within a year from surgery. This rate is lower than that reported in the literature. A significant association was found between UTI in the first postoperative year and duration of hospitalization and the rate of readmissions.