

PREVALENCE AND RISK FACTORS FOR URINARY TRACT INFECTION FOLLOWING MIDURETHRAL SLING INCONTINENCE SURGERY

Hypothesis / aims of study

One of the most common complications following Midurethral slings (MUS) placement is urinary tract infection (UTI). The 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 in a university affiliated medical center.

Study design, materials and methods

A retrospective cohort study was conducted to identify and characterize patients who suffered UTI within a year following MUS surgery. The 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. Data included 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 was also performed.

Results

During the study period, of 180 stress incontinence surgeries, 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. 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. However, duration of hospitalization and the rate of readmissions in the first year following surgery, were significantly associated with the risk of UTI ($p < 0.026$ and $p < 0.003$, respectively).

Interpretation of results

Approximately one in every five women undergoing a MUS operation in our population suffer from UTI within a year from surgery.

Concluding message

Our 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.

Disclosures

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