

# Iatrogenic foreign body in bladder induced recurrent urinary tract infection: a case report

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**Abstract.** – Urinary tract infections (UTI) are the most common infections in women. Although these infections can be seen in healthy women without any anatomical and functional pathology in etiology, foreign bodies should also be considered. We present a foreign body case due to iatrogenic causes which had recurrent urinary tract infections for 5-6 months and that did not respond to medical treatment.

*Key Words:*

Bladder, Foreign body, Recurrent urinary tract infection, UTI.

## Introduction

Urinary tract infections (UTIs) are the most common infections in women]. While *Escherichia (E.) coli* is the most detected causative agent with 70-75% in these infections, *Staphylococcus saprophyticus* follows *E. coli* in the rest of the diseases<sup>2</sup>. Although UTIs can be markedly seen in healthy women, recurrent UTIs suggest functional and anatomic disorders or foreign bodies<sup>3</sup>. In this case report, we present a patient who had not responded to medical treatment for 5-6 months and was identified as an iatrogenic foreign body case resulting from inadvertently insertion of a piece of plastic sheath of Foley catheter into the bladder during catheterisation.

## Case Report

A 33-year-old woman came to our Clinic with the complaints of dysuria, pollachiuria and groin pain for 5-6 months. In her history, she remarked two visits to Urology Clinic where she

was diagnosed UTI and prescribed antibiotics after urine tests. She admitted improvement of her symptoms after antibiotics in the following 1-2 weeks but also noted recurrence of the same symptoms as the cessation of drugs. Her past medical history was significant for cesarean section which had performed six months ago. In her microscopic urine analysis, 132 leukocytes were found in per field and *E. coli* production in consecutive cultures was noted. Ultrasonography was consistent with cystitis and showed diffuse bladder wall thickening. She was scheduled for diagnostic cystoscopy and given medication to relieve her complaints. Under general anesthesia a 20 Fr rigid cystoscope (Karl Storz, Germany) was introduced to the bladder. On the floor of bladder a gray-white colored foreign body was seen and taken out with a foreign body forceps (Figure 1).

## Discussion

Major risk factors for recurrent UTI in women are: sexual activity, contraception (especially spermicides and diaphragms), estrogen medication, anatomic and functional genitourinary system disorders and foreign bodies in the bladder<sup>1-5</sup>. Patients with urinary system infection usually present with dysuria, pollachiuria, frequency, urgency, suprapubic pain and fever<sup>1</sup>. The basic diagnostic test for these patients is microscopic urine evaluation. However, for those with recurrent infections prescribing suitable antibiotics and discharging the patient according to urine test results would not be an appropriate approach. In these cases, it is essential to make comprehensive differential diagnosis including foreign bodies as well as perform complete assessments.



**Figure 1.** Foreign body which was removed from the bladder.

Foreign bodies can reach into the bladder via several routes<sup>3</sup>. As this happens mostly via urethral way, it can occur by migration from other adjacent organs as well<sup>3,5,6</sup>.

There are plenty of foreign bodies removed from bladder in reported data such as pencil, intrauterine device, dry battery, glass stick and latex<sup>7,8</sup>. However, a nylon fragment that breaks off Foley catheter sheath and inserted into the bladder during catheterisation, as in our case, has not been reported. Our primary goal for this case report was attracting attention for possible iatrogenic foreign body effects of Foley catheterisation.

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