

## Foreign bodies in the urinary bladder - case report

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**Abstract:** INTRODUCTION Pathological substances produced by the body and entering the urinary bladder cannot be considered foreign bodies. They are more common in women than in men, with a ratio of 100:1 according to some statistics (Sonntag). They can be of animal, plant, or mineral origin. Medical foreign bodies remain after certain surgical interventions, either in the bladder itself or on surrounding organs, due to negligence, carelessness, incorrect use, or poor quality of materials. **CASE REPORT** Patient C.R. from the vicinity of Donji Milanovac, aged 30, presented to our clinic complaining of frequent urination, burning sensation during urination, and occasional sudden cessation of urination. Anamnestic data were very scarce, except for the mentioned symptoms. Urine sediment showed a significant number of pale red blood cells and rare bacteria. Urine culture yielded sterile cultures. Descending cystography revealed an ellipsoid contrast defect. Subsequent urethrocystoscopy showed a urethra easily passable for a Ch 20 cystoscope sheath, with a short prostatic urethra of about 2 cm. **CONCLUSION** Operative findings revealed: A round dark-brown formation, the size of a pigeon's egg, was observed in the bladder lumen. A "stone" was extracted from the bladder lumen with stone forceps and placed in a kidney basin. After completing the operation, the image showed a foreign body. Three snake-like objects, twisted, with a length of about 10 cm and a thickness of about 10 mm, were found in the kidney basin. They were candles.

**Keywords:** urinary bladder foreign body, Cystoscopy, candles, quackery

### INTRODUCTION

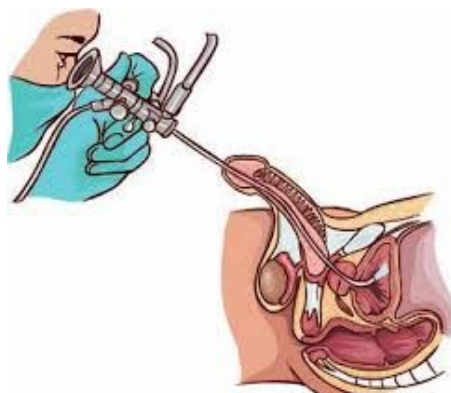
Pathological substances produced by the body and entering the urinary bladder cannot be considered foreign bodies. They are more common in women than in men, with a ratio of 100:1 according to some statistics (Sonntag). They can be of animal, plant, or mineral origin. Medical foreign bodies remain after certain surgical interventions, either in the bladder itself or on surrounding organs, due to negligence, carelessness, incorrect use, or poor quality of materials.

Foreign bodies introduced through the urethra can be residual parts of tools used for diagnostic purposes (parts of catheters, bougies, probes). These are most commonly gauze, swabs, parts of drains, catheters, or probes, and very rarely surgical instruments. Objects introduced into the urethra for masturbation or sexual perversion purposes (needles, hairpins, thermometers, candles, grain spikes, grass, worms) enter the urinary bladder via antiperistalsis. Objects used to close the urethral meatus to prevent conception (candles, textile tampons, rubber). Objects used for criminal abortions (plant roots, wooden objects) mistakenly inserted into the urethra instead of the vagina. Injuries from firearms, more common in war and less so in peacetime conditions, can create a foreign body due to a retained projectile in the bladder itself or migration from the surrounding area.

### CASE REPORT

Patient C.R. from the vicinity of Donji Milanovac, aged 30, presented to our clinic complaining of frequent urination, burning sensation during urination, and occasional sudden interruption of urination. Anamnestic data are very scarce, except for the mentioned symptoms. Urine sediment analysis revealed numerous pale red blood cells and occasional bacteria. Urine culture showed sterile growth media. Descending cystography revealed an ellipsoid defect in contrast. Subsequently, urethrocystoscopy was performed (Figure 1): the urethra allowed easy passage for the sheath of the 20 Fr cystoscope, with the prostatic urethra measuring approximately 2 cm in length.

Figure 1. Urethrocystoscopy Cystoscopy (taken from:[http://cdn.futura-sciences.us/builds/images/thumbs/4/41b85c2a84\\_cystoscopie-c-hakan-corbac-305-fotoliacom.jpg](http://cdn.futura-sciences.us/builds/images/thumbs/4/41b85c2a84_cystoscopie-c-hakan-corbac-305-fotoliacom.jpg))



The bladder neck is normal. A round dark-brown formation, the size of a pigeon egg, is observed within the bladder lumen. Suspecting a calculus, attempts were made to perform electrohydraulic lithotripsy with Urat-I. However, stone disintegration was unsuccessful, leading to a recommendation for surgical stone removal.

Operative findings: Under general endotracheal anesthesia, the surgery was performed. A Pfannenstiel suprapubic incision was made. After fascial incision, the rectus muscles were separated, and the bladder wall was dissected and transversely opened. The "stone" was removed from the bladder lumen using stone forceps and placed in the kidney. The bladder was irrigated with warm saline solution, sutured in two layers, a drain was placed in the Retzius space, the rectus muscles were approximated, skin closure performed, drain fixation, wound dressing with gauze. Following completion of the surgery (Figure 2), foreign bodies were observed.

Figure 2. Foreign bodies - candles, surgically removed from the bladder



To our astonishment, three snake-like objects, curved, approximately 10 cm in length and 10 mm in diameter, were found in the kidney. They turned out to be candles.

Then our professional struggles began. The patient stubbornly refused to disclose how the candles ended up in the bladder. After a patient, persistent, and even ultimative conversation, here is his story: Fearing he had "been infected," he turned to a witch doctor. She suggested that for three days he should apply fresh cow dung around his genitals. To prevent the dung from entering the canal, the witch doctor instructed him to insert a candle into it. The next day, there was no candle in the canal during the new application, so he inserted another candle, and the next day, one more. This is how his "treatment" ended. Three to four months later, urinary problems arose, prompting him to see a urologist.

## DISCUSSION

In most cases, foreign bodies in the urinary bladder occur in individuals with psychopathological, mentally impaired, or intoxicated states. Small children, in innocent play, often insert various objects into natural orifices. Women may accidentally or due to negligence or lack of knowledge insert contraceptive devices or abortion aids into the urethra instead of the vagina. Medical foreign bodies may remain accidentally due to carelessness, negligence, incorrect use, or poor material during a surgical intervention in the bladder itself or on surrounding organs. Even surgical suture materials can act as a nucleus around which a stone forms. Firearm injuries, more common in war and rarer in peacetime, can create a foreign body due to a retained projectile in the bladder or its surroundings. Cases of projectile migration from the abdomen into the urinary bladder have been described.

Symptomatology is dominated by persistent, recurrent, and antibiotic-refractory cystic complaints. Cystic complaints result from irritation of the mucous membrane due to mechanical pressure. Painful hematuria may also occur. Retention occurs depending on the shape and size of the foreign body, due to closure of the internal opening of the urethra. Complications may include fistulas due to prolonged mechanical pressure on the bladder wall, septic conditions, and even kidney function damage.

Diagnosis is easy if there is a history of foreign body insertion into the urethra. However, the true reasons are often concealed due to shame or fear. Diagnosis is also challenging in mentally retarded individuals and small children. Patients typically consult a doctor due to persistent cystic complaints after prolonged use of antibiotics.

In the urine sediment, signs of nonspecific inflammation predominate, with the presence of fresh erythrocytes and leukocytes. Ultrasonography shows a hyperechoic lesion (with shadowing), while intravenous pyelography on descending cystography reveals a contrast defect. The most reliable diagnostic method is URETHROCISTOSCOPY. It detects the foreign body, shows its shape and size, and determines the possibility of elimination. A very small percentage of foreign bodies (about 3%) can be spontaneously eliminated per urethra. Depending on the shape and size of the foreign bodies, endoscopic extraction or cystolithotomy methods are used in therapy.

## CONCLUSION

Patient C.R. from the vicinity of Donji Milanovac, aged 30, presented to our clinic complaining of frequent urination, burning sensation during urination, and occasional sudden interruption of urination. On descending cystography, an elliptical contrast defect was observed. Subsequently, urethrocystoscopy was performed, revealing a urethra easily passable for the sheath of a size 20 cystoscope, with a prostatic urethra approximately 2 cm in length.

In the bladder lumen, a round dark-brown formation the size of a pigeon egg was noticed. Suspecting a calculus, attempts were made at electrohydraulic lithotripsy with Urat. However, stone disintegration failed, leading to a recommendation for surgical stone removal.

Operative findings: A "stone" was extracted from the bladder lumen using stone forceps and deposited in the kidney. After the completion of the surgery, the image showed a foreign body. In the kidney, three coiled objects, approximately 10 cm in length and 10 mm in diameter, were found. They were candles.

Quackery exists in eastern Serbia. Here is an example. It was our intention to point this out so that it does not happen again and is not forgotten!

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