

## Mesane Tümörünü Taklit Eden İntravezikal Yabancı Cisim: Nadir Bir Olgu Sunumu

### Intravesical Foreign Body Mimicking Bladder Tumour: A Rare Case Report

Engin Kaya<sup>1</sup> , Nejdet Karsiyakali<sup>2</sup> , Selcuk Sarikaya<sup>1</sup> , Sinan Akay<sup>3</sup> , Turgay Ebiloglu<sup>1</sup> ,  
Murat Zor<sup>1</sup> , Selahattin Bedir<sup>1</sup> 

<sup>1</sup> Health Science University, Gulhane Training and Research Hospital, Department of Urology, Ankara, Turkey

<sup>2</sup> Cukurca State Hospital, Department of Urology, Hakkari, Turkey

<sup>3</sup> Health Science University, Gulhane Training and Research Hospital, Department of Radiology, Ankara, Turkey

### ÖZET

Mesane içerisinde yabancı cisim oldukça nadir görülmekle birlikte ürologlar için zorluklara neden olabilir. Mesane kanserini taklit eden yabancı cisimler ise daha nadir görülmektedir. Bu olgu sunumunda, on yıl önce geçirdiği trafik kazası nedeniyle pelvik cerrahi öyküsü olan, tekrarlayan üriner sistem enfeksiyonu ve mikroskopik hematüri nedeniyle yapılan görüntülemelerde mesane tümörü tanısı alan 40 yaşındaki kadın hastayı sunuyoruz. Operasyon sırasında pelvik metalik fiksatorlerin mesanede oluşturduğu erozyonun mesane malignitesini taklit ettiğini fark ettik.

**Anahtar Kelimeler:** *Mesane, mesane kanseri, yabancı cisim*

### ABSTRACT

Foreign body in the bladder is very rare entity and can cause difficulties for the urologist. Foreign bodies mimicking the bladder cancer are even more rare. In this case, we report a 40-year-old woman who has complain recurrent urinary tract infection and microscopic hematuria and has a pelvic surgery history due to traffic accident ten years ago. She was diagnosed as bladder tumor after imaging. However, during the procedure we realized that the erosion of the bladder by the pelvic metallic fixators were mimicked a bladder malignancy.

**Keywords:** *Bladder; Bladder Cancer; Foreign-body*

### INTRODUCTION

Foreign body in the bladder is very rare entity and can cause difficulties for the urologist. This often occurs as a result of sexual activities or during invasive procedures [1,2]. These patients may be asymptomatic or with frequent urinary infections, painful voiding, hematuria and mimicking bladder tumour findings [2,3]. Herein, we report a case who has a pelvic surgery history due to traffic accident, and the erosion of the bladder by the pelvic metallic fixators were mimicked a bladder malignancy.

### Case Report

A 40-year-old woman was referred to our clinic with recurrent microscopic hematuria and urinary tract infection. She has not smoked tobacco and has no history of occupational exposure to aromatic amines or any other carcinogens for bladder cancer. The patient had history of traffic accident ten years ago. The patient underwent pelvic fixation with the cause of pelvic fracture. Laboratory investigations such as electrolyte profile and blood count were in normal limits but routine urine analysis showed pyuria and microscopic hematuria. There was no pathogen bacteria in urine culture. On physical examination, there was a pelvic scar. Ultrasonography (USG) showed 26x14 mm and

**Corresponding Author:** Engin Kaya, HSU Gülhane Eğitim Araştırma Hastanesi, General Tevfik Sağlam Cad. Etlik/Ankara

**GSM:** +90 505 706 01 75 **F:** +90 312 304 20 00 **e-mail:** drenginkaya@yahoo.com

**Received:** November 6, 2019 - **Accepted:** January 24, 2020



This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

22x17 mm sized, well-defined, hyperechoic, two adjacent solid lesions protruding to the lumen at the right lateral wall of the bladder. There was no posterior acoustic shadow which one could made suspicious on bladder stone or foreign body in the bladder. There was internal vascularization and aliasing artefact in the lesions on color Doppler examination. According to findings on USG, standard transurethral resection of bladder tumour was considered.

During the resection of the lesion, foreign body in metallic image was seen posterior of the lesion (Figure 1). The procedure was terminated with bleeding control. Because of the classical papillary seem of the tumour we did not think to take a photograph when starting the procedure.

Pelvic plain radiogram was obtained after this procedure and multiple old fractures and prevalent degeneration were observed in many pelvic bones, especially on the right side of the pelvis. There were metallic internal fixation materials on the right pelvic bones. On non-enhanced CT, those materials were very near to the right lateral wall of the bladder on the medial side and no fat tissue was seen between those structures suggestive of the internal fixator migration to the bladder (Figure 2a/2b).

The histopathologic examination confirmed that a non-specific active cystitis. The urethral catheter was removed at post-operative third day. Foreign body removal was offered to the patient but the patient did not accept this procedure.

## Discussion

Many foreign bodies have been reported in the bladder such as surgical gas, pencils, metal wire, intrauterin device and a piece of foley balloon catheter [4-6]. Ophoven et al. [2] reported that in their review article the most common motive associated with foreign bodies of the genitourinary tract is sexual or erotic in nature. Foreign body related complaints may include acute cystitis with frequent and painful voiding, stranguria, recurrent hematuria and urinary infections. Sometimes clinical presentation could be swelling of the external genitalia, a poor stream or even urinary retention. Patients rarely present with no symptoms [2]. Tumour-like structures can be observed in diagnostic imaging methods. Definitive diagnosis can be made by endoscopically lesion appearance and pathologic sampling.

In this report, our case was referred to our clinic frequent urinary infections and microscopic hematuria. Since USG did not report any foreign body or not suspicious of it, we performed the routine bladder tumour approach. Primarily, the bladder tumour was resected with bipolar energy in the right lateral wall of the bladder. During the resection, metallic foreign body were observed behind the tumoural area. In postoperative period, plain graphy and non-enhanced CT images confirmed the metallic nail of pelvic fixation in the bladder.

A wide variety of foreign bodies have already defined in the bladder [2], however bladder tumour-like appearance of bladder foreign bodies are really rare [3,7,8].

## Conclusion

The presence of a foreign body mimicking the bladder tumour is a very rare condition. A detailed anamnesis should be considered in patients who have suspicious of bladder tumour on USG images and have a history of pelvic surgery before. Clinicians should be skeptical about the possibility of iatrogenic bladder injury in these patients, especially who has not a strong suspicious anamnesis for bladder cancer.

## Acknowledgement

No financial or commercial interests from any drug company or others were taken and there is no relationship of authors that may pose conflict of interest.

## Informed Consent

Written informed consent was obtained from the patient for publishing the case report.

### Author Disclosure Statement

The authors have no conflicts of interest to declare..

### Funding Sources

No grants or funding was provided for this study.

### Author Contributions

Engin Kaya: Concept/Design

Selcuk Sarıkaya: Data Collection and/or Processing/Critical Review

Nejdet Karsiyakali: Materials/Manuscript writing/Editing

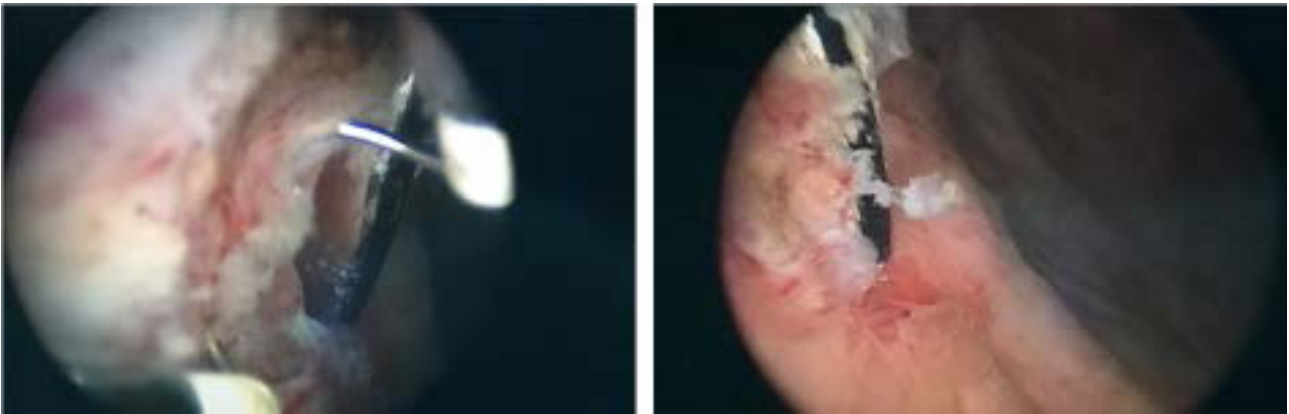
Sinan Akay: Manuscript writing

Turgay Ebiloglu: Analysis and/or Interpretation

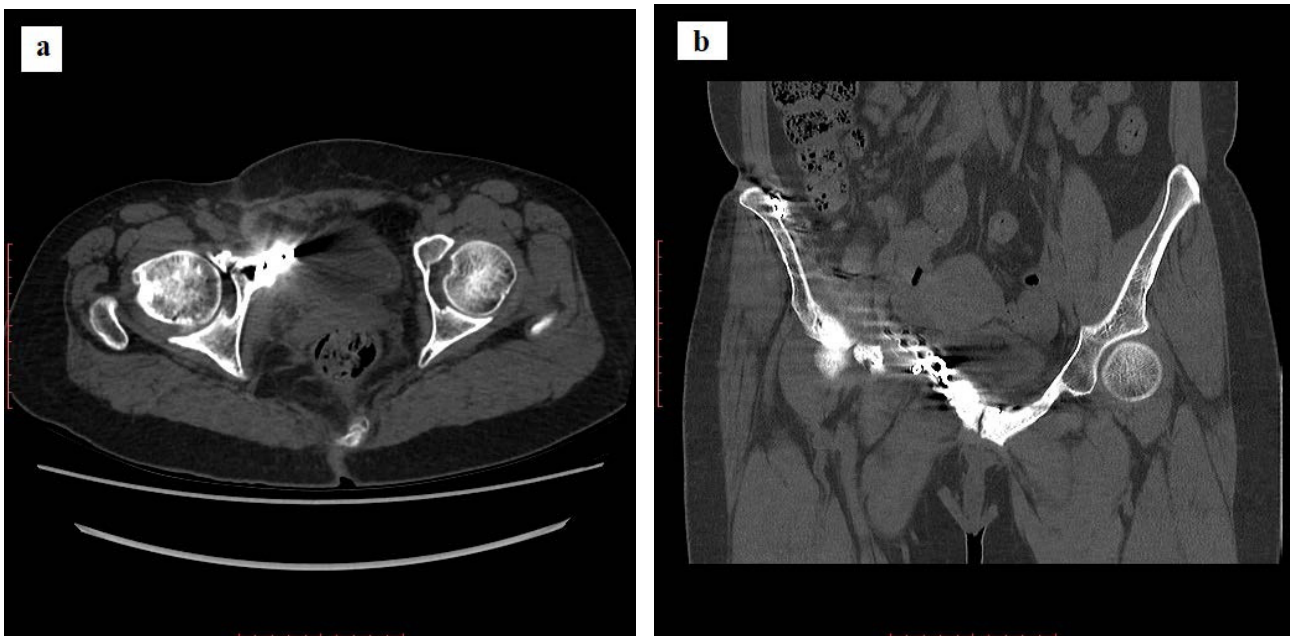
Murat Zor: Literature Search/Resources

Selahattin Bedir: Critical Review/Supervision

### Figure Legends



**Figure 1:** The metallic foreign body in the bladder



**Figure 2:** On axial (a) and coronal (b) non-enhanced CT images, the vicinity of the metallic internal fixation materials and the right lateral wall of the bladder is seen. No fat tissue was recognized between those structures suggestive of the internal fixator migration to the bladder..

## REFERENCES

1. Johnin K, Kushima M, Koizumi S, Okada Y. Percutaneous transvesical retrieval of foreign bodies penetrating the urethra. *J Urol.* 1999;161(3):915-6.
2. van Ophoven A, deKernion JB. Clinical management of foreign bodies of the genitourinary tract. *J Urol.* 2000;164(2):274-87.
3. Ker CR, Lin KL, Long CY. Intravesical endometriosis mimicking bladder cancer. *Int Urogynecol J.* 2016;27(10):1605-6.
4. Dalton DL, Hughes J, Glenn JF. Foreign bodies and urinary stones. *Urology.* 1975;6(1):1-5.
5. Cho DS, Kim SJ, Choi JB. Foreign bodies in urethra and bladder by implements used during sex behavior. *Korean Journal of Urology.* 2003;44(11):1131-4.
6. Oguntayo O, Zayyan M, Odogwu K, Koledade K, Mbibu H, Bello A, et al. Foreign body (metallic flashlight cover) in the urinary bladder mimicking advanced cancer of the cervix: Case report and review of the literature. *African Journal of Urology.* 2009;15(2).
7. Novaretti JP, Silva RD, Cotrim CA, Souto LR. Migration mesh mimicking bladder malignancy after open inguinal hernia repair. *Hernia.* 2012;16(4):467-70.
8. Corso R, Sacerdoti S, Zoldan MC, Rovere G. [Retained surgical sponge mimicking bladder neoplasm. Report of a case and diagnostic assessment with ultrasonography and computerized tomography]. *Radiol Med.* 1998;95(3):256-8.