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Case Report

Neuro-Vesical Dysfunction Aggravated by Self Introduced Foreign Body in Urinary Bladder-An Unusual Case Report

H Krishna Moorthy*, Lal Darsan, Ashwin Krishnamoorthy, Anupama Chithra, Thulasi P and Shyama Albert

Division of Urology, Institute of Nephro-Urology, Lourdes Hospital, Kochi, India

***Corresponding Author:** H Krishna Moorthy, Division of Urology, Institute of Nephro-Urology, Lourdes Hospital, Kochi, India.

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Abstract

Foreign bodies in the urinary bladder can produce a variety of storage and obstructive urinary symptoms and later lead to serious complications. It is very difficult to introduce long and flexible foreign bodies into male urinary bladder due to the peculiar anatomy of the urethra. We present the case report of a 29-year-old male patient who inserted a very long foreign body into his bladder for alleviation of symptoms of overactive bladder not responding to medications, which unfortunately led to further aggravation of his symptoms.

Keywords: Overactive Bladder; Foreign Body; Urinary Bladder

Introduction

Foreign bodies (FB) in the urinary bladder are not very rare and most of them have sexual or erotic origin. Majority of these patients who insert objects for sexual pleasure do not disclose the history and hence a high index of suspicion is needed in patients who present with symptoms like dysuria, frequency, urgency, hematuria, urinary obstruction and recurrent UTI occurring in unusual circumstances. Patients with overactive bladder (OAB) who present with storage symptoms also require investigations to rule out the presence of a foreign body in the bladder. It is also necessary that patients with OAB, while on treatment should be evaluated repeatedly to identify any organic causes that develop further during the course of treatment. We present an unusual case report of a 29-year-old male patient who while on treatment for OAB was found to have a FB in his urinary bladder, on repeated investigations.

Case Report

A 29-year-old male patient presented with increased frequency of urination (urination almost every 30 minutes), severe dysuria and nocturia (approximately 8-10 times every night) of 6 months' duration. He gave history of having similar symptoms in a mild degree for the last 7 years, for which he was fully evaluated then. He was diagnosed to have OAB since there were no demonstrable causes for his symptoms. The patient was earlier on antimuscarinics and beta agonist drugs in addition to medications like imipramine, flavoxate and dicyclomine in various combinations. There was no relief for his symptoms. The investigations were repeated this time, which showed microhematuria with pyuria. Ultrasound scan (USS) of abdomen showed a hyperechoic mobile mass in the urinary bladder of approximate size 4 cm. X-ray KUB in erect view, showed a radio-opaque shadow in the dependent region of pelvis (Figure 1) and CT scan of pelvis confirmed the calcified mass of size 4 X 3.5 cm to be within the urinary bladder (Figure 2). There was no abnormal thickening of bladder wall elsewhere. Cystoscopy showed that the mass was densely calcified and could not be broken with intracorporeal lithotripters. Hence an open cystotomy was done and the object was removed (Figure 3). On untwisting and dissecting the object, it was a long nylon thread of approximately 160 cm long which became coiled and calcified (Figure 4). On detailed interrogation, the patient disclosed that he had self-introduced the object nearly 2 years back to get relief from his symptoms of OAB.

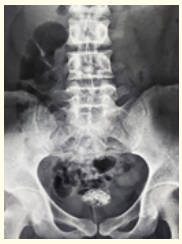

Figure 1: Erect X-ray KUB AP view. The arrow shows a well-defined dependent radio-opaque shadow in the region of pelvis likely within the urinary bladder.

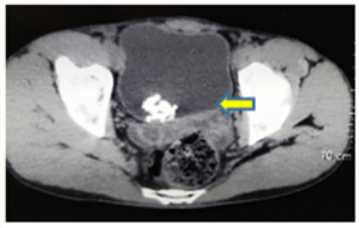

Figure 2: CT (Plain) of the Pelvis (axial view). The arrow shows a densely calcified irregular dependent mass 4 x 5 cm within the urinary bladder.

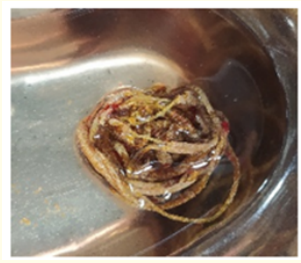

Figure 3: FB retrieved from the urinary bladder.

Figure 4: FB untwisted and dissected out.

Unfortunately, the object got calcified and his symptoms aggravated. On follow up, the patient has been doing well and he is currently on behavioural therapy and medications for OAB.

Discussion

Foreign bodies in the urinary bladder can produce severe storage and voiding urinary symptoms and lead to hematuria and recurrent UTI. Martine-Valls., *et al.* [1] have classified the foreign bodies in the urinary bladder as 1. self-introduced 2. accidental 3. iatrogenic and 4. those migrated from other organs. They have also suggested a diagnostic and therapeutic algorithm for management of this condition. It is anatomically very difficult to self-insert a long object into the urinary bladder in a male person, through the long and tortuous male urethra and there is paucity of such case reports in literature. Jani., *et al.* [2] reported the case of a 95 cm long foreign body in the urinary bladder, while Mukerji., *et al.* [3] reported a 142 cm long electric cord self-introduced into the urinary bladder by a 12-year-old girl. A similar foreign body retrieved from the urinary bladder reported in literature is that of a 49-year-old male patient who inserted a vinyl tube into his bladder for masturbation [4]. Gokhroo S reported the case report of a 50-year-old married man with history of inserting electric wire in urethra and X-ray pelvis showing coiled metallic foreign body in the bladder region similar to the foreign body identified in our patient [5]. Bansal., *et al.* [6] have characterised the nature of foreign bodies, clinical presentations, mode of insertion and management of 49 cases of foreign bodies in the urinary bladder treated in their centre. Majority of foreign bodies in the urinary bladder could be retrieved through endoscopy, failing which, open removal is done. Children with foreign bodies in the lower urinary tract have rarely been reported, and their management remains challenging [1].

The case report of our patient is unique in that the patient was suffering from OAB with no demonstrable causes for the past 7 years which was managed by conservative treatment. Since the patient had not much relief from medications, he self-inserted a very long foreign body (probably the longest ever foreign body retrieved from the urinary bladder) into his urinary bladder for alleviation of symptoms. Unfortunately, this material got calcified and his symptoms aggravated. Unusual findings like microhematuria and pyuria with aggravation of symptoms gave us an index of suspicion, leading us to repeat the investigations, identify the cause and treat him appropriately.

Conclusion

Patients with overactive bladder (OAB) who present with storage urinary symptoms should be evaluated in detail to identify the presence of underlying disease pathologies in the urinary bladder including foreign bodies. It is also necessary that patients with OAB, while on treatment should be serially followed up with repeated investigations to identify any organic causes that develop further during the course of treatment.

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