FOREIGN BODIES IN THE URINARY BLADDER: COLWORTH’S EXPERIENCE

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DOI: http://dx.doi.org/10.24327/ijrsr.2020.1108.5518

ABSTRACT

Background: Intravesical foreign bodies have been a real challenge to the urologist. Different types of foreign bodies have been removed from the urinary bladder, which include catheter part, intrauterine contraceptive device (IUCD), gauze, sutures, etc.

Aim: To determine the kinds of foreign body and most suitable methods of retrieving them.

Patients and methods: This is a prospective study, total of 6 patients (one male and five females) were admitted into Colworths Medical Centre between January 2017 and September 2017. After admission, all the patients were evaluated with case history, clinical examination, ultrasonography of the abdomen, plain abdominal x-ray, and routine full blood count. Information obtained include age, gender, diagnosis, procedure and duration of surgery were analyzed. Every patient had check cystoscopy with combination of 2% xylocaine gel instilled into the urethra and mild sedation.

Results: During the period of study 6 patients 2 male and 4 females with age range from 22 to 64 years of mean age. Initial cystoscopies were performed for all 6 patients, 2 patients had the remnant of latex balloon catheter picked out using grasper, 2 had the intravesical suture cut using the hook knife, 1 patient had migrated intrauterine contraceptive device removed using hook grasper and 1 patient had an exploration of the bladder after a failed attempt at removing an intravesical gauze.

Conclusion: Intravesical foreign body can be seen in the urinary bladder and as such can pose a challenge to the urologist. The use and knowledge of endoscopy has made the surgery easier, faster and patient recovery satisfactory.

INTRODUCTION

Foreign body in the urinary bladder is relatively rare and poses urological challenges in terms of diagnosis and treatment. Foreign bodies have been inserted as a result of self-insertion, iatrogenic, migration from adjacent organs and penetrating ballistic trauma [1]. Different types of foreign bodies have been removed from the urinary bladder, which include electric wires, safety pins, hairclips, intrauterine contraceptive device (IUCD), gauze, sutures, broken pieces of Foley catheter [2,3]. Patients presentation may be asymptomatic or may present with complaints of lower urinary tract symptoms, chronic pelvic pain, urinary retention or even anuria in patients with iatrogenic bilateral ligation of the ureter where the sutures cut through the ureteric orifices as depicted in one of our patients. Radio opaque foreign body will be seen on plain X-ray while ultrasonography and is useful in radiolucent foreign body. Computerized tomography also has its use in diagnosis. Cystoscopy has both diagnostic and therapeutic value. Treatment is usually based on the nature, location, size of foreign body and the age of the patient [4]. Our aim is to determine the kinds of foreign body and most suitable methods of retrieving them.

PATIENTS AND METHODS

We conducted a prospective study with total of 6 patients (two male and four females) admitted into Colworths Medical Centre between January 2017 and September 2017. Following admission, all the patients were evaluated with case history, clinical examination, ultrasonography of the abdomen, plain abdominal X-ray, and routine full blood count. Information obtained include age, gender, diagnosis, procedure and duration of surgery were analyzed. Every patient had check cystoscopy using size 26Fr with combination of 2% xylocaine gel instilled into the urethra and mild sedation. The summary of the foreign bodies in the urinary bladder were depicted in table 1.

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RESULTS

Table 1

<table>
<thead>
<tr>
<th>Case no.</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Foreign body</th>
<th>Circumstance of entry</th>
<th>Treatment</th>
<th>Hospital stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>64</td>
<td>Female</td>
<td>Intravesical suture</td>
<td>Iatrogenic Post hysterectomy</td>
<td>Cystoscopic removal</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>Female</td>
<td>Intrauterine contraceptive device</td>
<td>Migration</td>
<td>Cystoscopic removal</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>Male</td>
<td>Intravesical guaze</td>
<td>Iatrogenic following Open Prostatectomy</td>
<td>Cystoscopic removal</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td>Female</td>
<td>Intravesical suture</td>
<td>Iatrogenic Post hysterectomy</td>
<td>Cystoscopic removal</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>22</td>
<td>Male</td>
<td>Remnant of latex balloon</td>
<td>Iatrogenic</td>
<td>Cystoscopic removal</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
<td>Male</td>
<td>Remnant of latex balloon</td>
<td>Iatrogenic</td>
<td>Suprapubic cystotomy</td>
<td>2</td>
</tr>
</tbody>
</table>

During the period of study 6 patients, 1 male and 5 females, with age range of 22 to 64 years with mean age of 42. Initial cystoscopies were performed for all 6 patients. 2 patients had the remnant of latex balloon catheter picked out using grasper, 2 had the intravesical suture cut using the hook knife, 1 patient had migrated intrauterine contraceptive device removed using hook grasper and 1 patient had an exploration of the bladder after a failed attempt at removing an intravesical guaze. These were illustrated in table 1.

DISCUSSION

Intravesical foreign body is not uncommon. Usually, patients with this condition present with frequency, urgency, suprapubic pain and hematuria. A vesical calculus can be formed over a prolonged retention of foreign bodies, and renal failure has also been reported [5]. Various treatment options are reported which include endoscopic, percutaneous, open and laparoscopic, however endoscopic retrieval is the preferred treatment among urologist. Also the method of choice for extraction varies according to the size and mobility of object inside the urinary bladder [6]. In our study five of the foreign bodies were all iatrogenic while one was migrated intrauterine contraceptive device (IUCD). Figure 1 illustrated an encrusted old suture in the bladder, figure 2 showed bilaterally ligated ureteric orifices leading to oliguria and subsequent bilateral hydronephrosis. Figure 3 illustrated old suture attached to a wick of abdominal mop while figure 4 showed a large part of an abdominal mop left in the bladder following an open prostatectomy. Theretrieval methods were easily done endoscopically except that of figure 4. This treatment should aim at removing the foreign body avoiding complications. The method should also be selected based on size, nature and mobility of the object, for example our patient who had the retained rolled guaze following open prostatectomy was removed by bladder exploration as the content could not navigate through the urethra without causing injury. Some of the old sutures that eventually formed stones were initially crushed using a stone punch. Some foreign bodies have been introduced into the bladder in psychiatric patients and therefore should have psychiatric evaluation.

**Reference**