Case Report

INTRA VAGINAL WOODEN FOREIGN BODY CAUSING MULTIPLE INTERNAL FISTULAE AND BLADDER STONE IN A 12 YEARS GIRL

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ABSTRACT

Vaginal foreign bodies in girls may be accidental, self-inflicted or secondary to child abuse. These may causes a number of complications like Infections, abscess formation, intestinal perforation, vaginal discharge and internal fistulae. We are presenting a case of a 13 years old girl who presented with a supra-pubic mass and dysuria. X-ray showed a radio-opaque shadow in pelvis. The child was admitted in medical ward with the diagnosis of bladder stone and UTI. She was pouring frank pus from the vagina. On rectal digital examination a hard foreign body was felt in the rectum. Investigations revealed that she had a large pelvic collection, a sharp wooden Foreign Body (FB) extending from the rectum through the vagina in to the urinary bladder forming a bladder stone. Patient also developed recto-vaginal and vesico-vaginal fistulae. Foreign body was removed along with the bladder stone, pelvic abscess drained and colostomy was performed. Later repair of vesico-vaginal fistula were performed, recto-vaginal fistula closed spontaneously and colostomy closed. Patient became fully continent for urine and feces after completion of surgical procedures. A careful history from the child revealed that she had inserted the foreign body herself as a self-exploring practice.

KEY WORDS: Vaginal foreign body, Wooden, Internal fistula, Complications.

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INTRODUCTION

Vaginal foreign bodies in children may be missed for a long time and are likely to develop complications. Fever, abdominal pain, recurrent infections and vaginal discharge are common complications.[1,2] Sharp foreign bodies may cause serious complications like internal fistulae and resulting fecal and urinary incontinence.[3,4] Usually isolated perforations are seen involving one organ like bladder, rectum or peritoneum. Foreign bodies causing multiple internal fistulae and complications are rarely reported. We are presenting a case of a 12 years old girl who developed multiple complications secondary to a wooden foreign body. It was both

a diagnostic and management challenge and issue related to these are being discussed.

CASE REPORT

A 12 years old girl was referred from the medical ward with the diagnosis of bladder stone. There was three years history of lower abdominal pain, burning micturition, urinary incontinence and vaginal discharge. She had received treatment from local doctors without improvement of symptoms. She was also given anti-tuberculous therapy on empirical basis for nine months. X-ray abdomen showed a radiolucent shadow in pelvic area suggestive of bladder stone (Fig-1). On admission the child was pale, malnourished and emaciated. She had a broad based painful gait and a tender mass was palpable in the supra-pubic area. Digital rectal examination revealed a palpable hard object along the anterior wall of the rectum few centimeters from the anal verge. There was a constant purulent discharge from vagina.

Urine analysis revealed numerous RBC and pus cells with growth of E-coli. Blood counts showed leucocytosis with predominant polymorphs and normocytic normochromic anemia. On ultrasound, an abnormal shadow was noted in the utero-vesical area with a pelvic collection and distorted texture of pelvic wall muscles suggestive of an infective process. Sigmoidoscopy under anesthesia showed a large wooden foreign body impacted in the rectum. There was thick purulent vaginal discharge, vaginoscopy showed FB lying in the sagittal plane with its posterior end in the rectum and anterior end in the urinary bladder. Foreign body was partially removed from the rectum (Fig-2). Exploration was then performed through Pfenensteils incision. A Large collection of foul smelling pus was present in the suprpubic area, which was drained. Urinary bladder was opened vertically which showed a 3 cm diameter stone formation around the tip of FB, which had protruded from the posterior wall of bladder. Residual foreign body was removed along with the bladder stone (Fig-3). Bladder repaired, pus drained and the cavity washed. A defunctioning pelvic colostomy was performed. Condition of the patient improved rapidly and infection controlled after nearly three months of antibiotics treatment according to Culture Sensitivity reports. She initially developed suprapubic wound dehiscence then healed spontaneously. Patient had persistent urinary incontinence due to vesico-vaginal fistula which was confirmed

Fig-1: X-ray abdomen showing a bladder stone with a radio-lucent shadow inside the stone.

Fig-2: Partially removed wooden foreign body

Fig-3: Bladder stone being removed along-with the residual foreign body

on cystourethrogram. Sigmoidocopy after 6 months showed spontaneous healing of rectovaginal fistula. Transvesical repair of vesicovaginal fistula was performed, which controlled urninary leak, later colostomy was also closed. One year after her initial surgery the child became fully continent of urine & feces with no discharge and control of urinary tract infection. She was a shy girl and was hiding the sequence of events; later on careful inquiry it revealed that 3-years ago she herself inserted the wooden stick as a self-exploring practice.

DISCUSSION

Vaginal foreign bodies are seen in children at all ages. They may be accidental, self inflicted, secondary to child sex abuse and iatrogenic after genitourinary surgery.[5] Presence of FB in the vagina is doomed to have complications which include local infection, persistent vaginal discharge, vaginal bleeding, UTI, itching and perineal rash.[6] In some cases serious complication may occur which include perforation of foreign body into the urinary bladder, rectum or peritoneal cavity.[4] In these cases internal fistulae may be formed and patient may develop fecal or urinary incontinence.

Diagnosis may be difficult in children due to poor history. A vaginal FB shall be suspected in children with unexplained vaginal discharge, UTI, pruritis and perineal rash. Blood stained discharge is highly suggestive of FB. Wooden Foreign bodies are difficult to diagnose on plain radiology. Different types of wood have different degrees of hydrations resulting in variations in densities on CT scan.[7] Sonographic imaging, which is underutilized for this purpose, is superior in detecting wooden objects as they are highly echogenic and can be easily identified by ultrasound studies.[8] In our patient however ultrasound did not pickup the FB but did mention about the distorted appearance in that area. Wooden vaginal foreign bodies are rare due to the uneven and sharp nature of the material. Pushpa D and colleagues reported an impacted paintbrush with wooden stump in a nine years old girl who presented with persistent vaginal discharge. The FB was removed vaginally.[9] Our patient with a retained FB was having symptoms for three years and she was taken to various local doctors and even received treatment for tuberculosis for nearly nine months. At admission in the medical ward, vaginal FB was also missed and she was admitted with the diagnosis of UTI and bladder stone. FB was suspected on perineal examination when frank puss was seen pouring from the vagina and rectal digital examination confirmed a hard object in the rectum. Our patient initially did not mention about the foreign body and only after a careful history she mentioned about inserting the FB herself.

Foreign body in this patient caused multiple complications.[10] Posterior perforation into the rectum caused rectovaginal fistula, Perforation in the bladder caused vesicovaginal fistula. Foreign body even perforated through the superior wall of the urinary bladder causing pelvic abscess. Encrustation around the FB resulted in stone formation. So many complications in one patient have not been reported in a single patient.

Management of our patient was also difficult. She had a FB which was not retrievable from the rectum and vaginal due to impacted bladder stone. Suprapubic exploration was helpful as large amount of puss was drained and also the bladder stone was removed along-with the FB. Colostomy in this patient helped in sponta-

neous healing of the recto-vaginal fistula. Transvesical approach for the repair of the vesico-vaginal fistula was also curative. The reason for good response in this patient was that once the nidus of infection was removed then healing was rapid. This is in-contrast with fistulae resulting form co-excisting diseases, which are more difficult to manage.

In summary there is no substitute for good clinical evaluation. A proper history and examination by the treating physicians would have picked this foreign body much earlier and complications could have been avoided.

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