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Vaginal Foreign Body in a 4 Year Old Girl: A Case Report

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ABSTRACT

Vaginal foreign body is an uncommon clinical entity in the pediatric population but it is more common in mentally retarded and young children. In this case report, we present a 4-year-old girl who was brought to the emergency room with a history of self-insertion of a pen cap into the vaginal orifice which had no vaginal bleeding, vaginal discharge, abdominal pain or urinary symptoms.

INTRODUCTION

Vaginal foreign body is an uncommon complaint among pediatric population. This situation is often seen in mentally retarded and young children. Children insert an unbelievable spectrum of objects (pencils ,toys, sweets , and toilet paper) into the vagina mainly because of the curiosity [1].

Usually, they present with a purulent discharge, Vaginal bleeding, lower abdominal pain, supra-pubic pain, frequency, burning sensation and dysuria. The history is rarely helpful because the insertion is frequently not observed by an adult. Children may insert objects because of sexual stimulation, sexual abuse, pruritic genital area, body exploring and accident of post-surgery [2].

We could see severe immune compromise, disruption of the vaginal wall and perforation through the vagina into the abdominal cavity(causing acute abdominal symptoms) as complications after foreign body insertion [3].

It has been reported that 4% of pre-pubertal genital complaints among girls are related to vaginal foreign body insertion. The susceptible age range for vaginal foreign body insertion is between the ages of three and nine [4].

We discuss the case of a 5-year-old girl presenting after having placed a pen cap into her vagina.

CASE PRESENTATION

A 4-year-old girl was brought to the emergency room by her mother with a history of self-insertion of a pen cap into the vaginal orifice. The event occurred 5 hours prior to the presentation. According to the mother the child inserted the pen cap herself. She had no vaginal bleeding, vaginal discharge, abdominal pain and urinary symptoms.

On examination, she had stable vital signs. Her abdomen was soft and non-tender. The genital examination was done in a frog-legged position, showed a little erythema around the vaginal orifice. No abnormalities or tears were seen at the hymen. Anal sphincter tone was decreased. No evidence of the beating was noted. The results of the rest of her examination were normal.

Plain abdominopelvic x-ray revealed a cylindrical rod-like foreign body with increasing density in pelvic superior to symphysis , compatible with a pen cap. (Figure 1) In abdominopelvic sonography no evidence of free fluid was seen and an echogenic foreign body in vagina was noted. Before intervention cefotaxime and metronidazole were administered with adequate dosage.

After preparation, examination under general anesthesia with a speculum was performed. The foreign body was seen in vaginal canal and there were some erosion on the lateral wall of the vagina and the hymen was reactionary and intact. The foreign body was removed and using a C arm showed no other object remained.

According to the forensic medicine consultation, due to the decreased anal sphincter tone and history of urinary disorder when she was one year old, sexual abuse was suspected but

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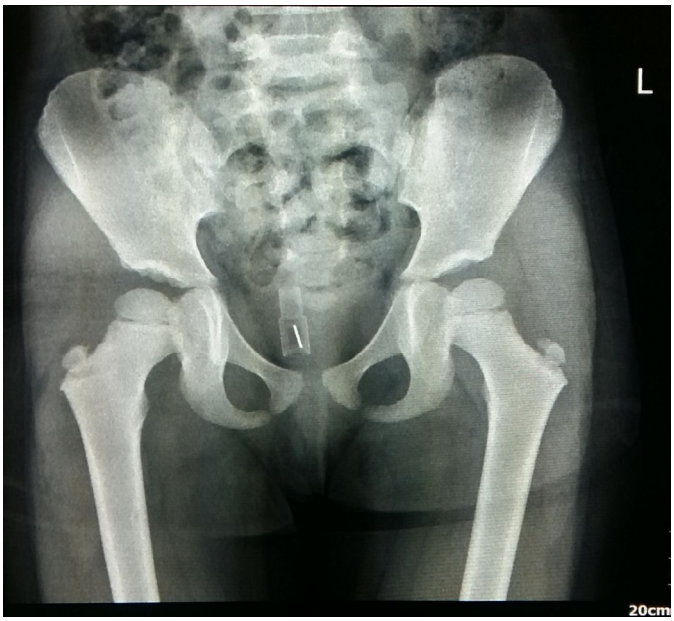

Figure 1. Abdominopelvic x-ray showing a cylindrical rod-like foreign body with increasing density in pelvic superior to symphysis.

denied by mother and child upon separate questioning. Psychological consultation was recommended.

DISCUSSION

The prevalence of vaginal foreign bodies in girls younger than 13 years with gynecological disorders has been reported 4.0%. [2]. Foreign body insertion into the vagina in childhood is not common. Such foreign bodies are inserted into the vagina because of the curiosity of the child or for sexual satisfaction or child abuse. The most frequent objects found in the vagina are small pieces of toilet paper [5].

When a child presents with a stinky, refractory vaginal discharge, we must think of a foreign body in the vagina. The duration of pre-visit discharge is approximately 13.7 months [6]. Stricker et al reported that 49% of girls with a vaginal foreign body had presented with vaginal discharge. Duration of symptoms varied from 1 day to 2 years. Duration of symptoms is variable from 1 day to 2 years. n 54% of the cases patient herself remembered inserting the foreign object. In 91% of cases, the patient herself remembers entering the foreign body or bleeding from the vagina or bloody and malodorous discharge or seeing or touching the foreign body during the physical examination [1]. A study reported that the etiology of vaginal discharge in girls younger than 6 years who underwent examination under general anesthesia in 45% of the cases was foreign bodies in the vagina [7].

Diagnosis of foreign bodies in the vagina needs cautious history taking, genital examination, pelvic ultrasound, pelvic radiography, rectal palpation and Magnetic Resonance Imaging (MRI) [8]. These techniques can't ascertain the number and condition of vaginal foreign bodies. MRI can determine number and condition of foreign bodies and adjacent anatomy. Although MRI is the best technique for assessing vaginal foreign bodies in young children it is not always available or necessarily conclusive. Striegel et al. recommends that all girls younger than 6 years with complaint of persistent vaginal discharge or bleeding be evaluated with pelvic examination while under anesthesia, to be followed by vaginoscopy and cystoscopy if no noticeable pathology is discovered by simple genital examination alone, regardless of the results of noninvasive imaging studies [1].

In our case, the foreign body was seen and removed by speculum under general anesthesia and C arm radiography showed no other remaining object. We recommend that examination by speculum or vaginoscopy under general anesthesia should be the 1st step in cases suspected to foreign body in vagina, because it can also be therapeutic at the same time. Pelvic radiography and ultrasound should be in next steps because if foreign body is detected, removal under general anesthesia is needed. MRI should not be in first steps because it is not easily available and if the foreign body is from metal, it can be hazardous.

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