SciMedCentral

Annals of Forensic Research and Analysis

Case Report

Rare Case Due to the Prolonged Time of Calcified Foreign Body inside Vagina

Ermilov VV* and Vlasova EV

Department of Forensic medicine, Volgograd State Medical University, Russia

***Corresponding author**

Victor Ermilov, Department of Forensic Medicine, Volgograd State Medical University, Volgograd, Russian Federation, Tel: +79061729926; Email: vladimirovich2001@hotmail.com

Submitted: 04 December 2015

Accepted: 30 December 2015

Published: 02 January 2016

ISSN: 2378-9476

Keywords

- Sexual assault
- Vagina
- Foreign body

Abstract

Forensic medical examination of a 25 year old woman who died in the hospital as a result of previous sexual assault which was done by the insertion of a foreign body (glass) into her vagina. Vaginal foreign body had not been removed for nine years since the assault. Presence of calcified foreign body caused its prolapse into the bladder through the vesicovaginal fistula with stasis of urine and formation of large stone conglomeration with mass of 650gr,causing the progression of infiltrative pyogenic vaginitis, necrosis of bladder wall, hydronephrosis, pyelonephritis, peritonitis, sepsis and anemia.

ABBREVIATION

VVF: Vesicovaginal Fistula; VFB: Vaginal Foreign Body

INTRODUCTION

Vaginal foreign bodies (VFBs) are more commonly seen in children than adults, with exceptional cases of such instances persisting for a long time. It is a fact, that foreign bodies will be calcified after a long time and such masses can cause vesicovaginal fistula (VVF) [1,2]. The effects depend upon the nature of the foreign body, duration of its existence and amount of tissue damage [3]. While a variety of symptoms may result from a foreign body in the vagina, the most common symptoms are vaginal bleeding or foul-smelling vaginal discharge [4].

Rarely do foreign bodies produce a systemic infection (sepsis) except in circumstances such as severe immunodeficiency or abrasion of the vaginal wall with secondary infection. Perforation through the vagina into the abdominal cavity may also result in acute abdominal symptoms. Chronic consequences of VFBs include imbedding of objects in the vaginal wall, pain during intercourse, bleeding, or the development of fistulae between the vagina and the bladder, rectum, or peritoneal cavity [5,6].

CASE REPORT

A 25 year old woman was admitted to the hospital with deteriorating condition on her 4th day of illness with thirst, shortness of breath, dizziness, nausea, vomiting, fever and pain in the lumbar region but did not get immediate medical help. Nine years ago, she was sexually assaulted with a 100ml glass inserted into her vagina. Her parents were unaware and the incident was not reported to the authorities. Pasterntsky symptom was positive on both sides. Urinating was difficult with oliguria. She was examined by surgeon and gynecologist. It was found that the external vulvar lips were normal however, labia majoria appeared edematous and cyanotic in color. Palpation confirmed the presence of a foreign object located passed the vaginal orifice. The foreign object was immovable. The ultrasound and pelvic X-ray showed marked bilateral urohydronephrosis with marked tuberous mass 11,5x8 cm in size. The patient had nephropyelostomy done on both kidneys however, due to disseminated intravascular coagulation syndrome and multi-organ failure, she passed away.

Major Autopsy findings

The external examination showed signs of malnutrition with normal constitution. Mammary glands and genitalia were normal. Mucous lining of vaginal vestibule were cyanotic. Hymen was circular with 0.8cm high. There were tears at 3 and 7 o'clock reaching the base of labia with thick pale edges. Internal vulvar lips were edematous and vagina narrow. The woman is nullipara.

The internal examination of abdominal showed dark blood hemorrhages on the anterior abdominal wall around the sutures. In the abdominal cavity there was about 200ml of liquid with segments of clotted blood. The abdominal peritoneum was cyanotic with spots of dark red hemorrhages. Right kidney was 13x5x5cm in size, with a mass of 250gr. It had thick blood permeated adipose tissue. The capsule was dissected exposing uneven surface of tissue damage. The kidney layers were indistinguishable on the crosscut, with parenchyma thickness 0.5cm. The renal pelvises were dilated with smooth, shining mucous lining of cyanotic hue and inserted rubber tubes. The wall of the right ureter was hypertrophied, lumen enlarged to 3.5cm in circumference. Left kidney was 10x4, 5x4cm. Macroscopic

characteristics of the left kidney were similar to the right one. Ureter was distended by 4cm in circumference.

The upper side of the urinary bladder had a VVF with calcified foreign irregular pear-shape stony conglomeration 11,5x8cm in size (Figure 1a,1b,1c). Its lower elongated end, 3x3cm in size, was inside the bladder while the front surface was a horizontal notch 3x1.5cm in size and 0.2cm deep (Figure 1d). It had sharp edges, connected via a wide stalk with the oval upper part located in vagina (Figure 1a,1b,1c). The bottom was pointing to the cervix uteri (Figure 1d). The wall of the bladder and the vagina were strongly adhered to the surface of stony conglomeration. In middle of the oval conglomeration there was a foreign body, a glass with smooth surface 6.5x3.6 cm with an opening of 3.86 cm in diameter and wall thickness of 0.2cm (Figure 1e). There was brown, granular content inside the glass (Figure 1f). The total mass of the glass and conglomeration was 650gr.

DISCUSSION

The presentation of this remarkable case illustrates various complications such as the formation of stone tuberous conglomeration around the foreign object (glass) of long duration (9 years) in the adult vagina, trauma of vaginal and urinary bladder walls, migration into the bladder, chronic pyelonephritis, hydronephrosis, corrosion, VVF formation, sepsis and peritonitis. Diagnosis was based on history in this case due to the lack of information of sexual assault, past history and psychiatric history of the patient, it is difficult to discuss about the reason of reluctance to inform the authorities or ask for medical help for the past 9 years**.** Women not reporting sexual assault were typically employed, had a history of recent alcohol or drug use, a known assailant, and prolonged time intervals between the assault and forensic evaluation ($p < 0.001$) [7]. Other liable reasons for not reporting were primarily environmental factors (prior relationship with assailant) or internal psychological barriers (shame, anxiety, fear) [7].

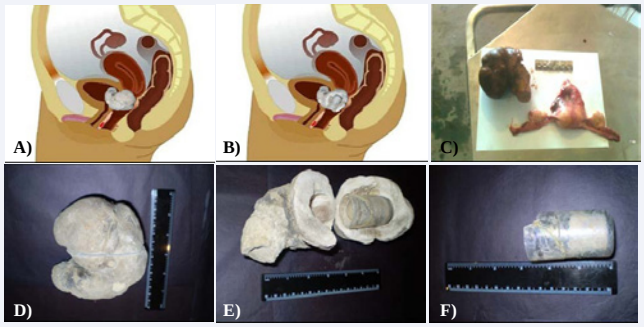

Figure 1 Calcified foreign body in the adult vagina.

REFERENCES

1. Powers K, Grigorescu B, Lazarou G, Greston WM, Weber T. Neglected pessary causing a rectovaginal fistula: a case report. J Reprod Med. 2008; 53: 235-237.
2. Puppo A, Naselli A, Centurioni MG. Vesicovaginal fistula caused by a vaginal foreign body in a 72-year-old woman: case report and literature review. Int Urogynecol J Pelvic Floor Dysfunct. 2009; 20: 1387-1389.
3. D.C. Dutta. Textbook of gynecology. 5th edition. Genital tract injuries. Foreign bodies. 2008; 418. ISBN 81-7381-041-9.
4. Simon DA, Berry S, Brannian J, Hansen K. Recurrent, purulent vaginal discharge associated with longstanding presence of a foreign body and vaginal stenosis. J Pediatr Adolesc Gynecol. 2003; 16: 361-363.
5. Biswas A, Das HS. An unusual foreign body in the vagina producing vesicovaginal fistula. J Indian Med Assoc. 2002; 100: 257, 259.
6. Picurelli L, López-Olmos J, Sendra A, Tramoyeres A. [Vesicovaginal fistula caused by foreign body in the vagina]. Actas Urol Esp. 1997; 21: 511-512.
7. Jones JS, Alexander C, Wynn BN, Rossman L, Dunnuck C. Why women don't report sexual assault to the police: the influence of psychosocial variables and traumatic injury. J Emerg Med. 2009; 36: 417-424.

Cite this article

Ermilov VV, Vlasova EV (2016) Rare Case Due to the Prolonged Time of Calcified Foreign Body inside Vagina. Ann Forensic Res Anal 3(1): 1023.