

# A Rare Case of Foreign Body Causing Recurrent Vaginal Discharge in Prepubertal Child

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## ABSTRACT

Vaginal discharge in prepubertal children is mainly due to hypoestrogenic state of vaginal mucosa making it thin and alkaline leading to mucosal invasion by pathogen. In a paediatric case with persistent foul smelling, blood stained vaginal discharge not responding to medical therapy, vaginal foreign body should always be ruled out. Here, we report a 3-year-old girl with complaint of recurrent vaginal discharge occasionally blood stained not relieved despite few antibiotics courses. On X-ray pelvis, a radioopaque foreign body hair clip was seen. Under sedation foreign body was removed by forceps following which child became asymptomatic.

**Keywords:** Foul smelling discharge, Sexual abuse, X-Ray pelvis

## CASE REPORT

A 3-year-old girl was referred from paediatric clinic with chief complaint of discharge per vagina since one month which was moderate in quantity, mucopurulent, non blood stained and non foul smelling. There was no history of perineal or perianal itching, fever and any behavioural problems. On examination she was of sound physical and mental health. Local examination revealed normal external genitalia with redness of the introitus and slight vaginal discharge. Blood sample was sent for routine examination and the reports were within normal limits, vaginal discharge for AFB was negative and cultural sensitivity showed *Klebsiella* sensitive to amoxycylav, gatiflox and imipenem. Child was treated accordingly. Patient reported back after one month with same and this time with foul smelling discharge. Tridot test for RVD was negative, chest X-ray was normal, vaginal discharge culture sensitivity showed *Klebsiella* sensitive to co-amoxiclav, gatiflox and imipenem. Child was started on second course of antibiotics. Patient didn't follow up and reported after three months with persistent foul smelling vaginal discharge which was slightly blood stained. The Child was sent for X-ray pelvis which revealed radioopaque foreign body (hair clip) in vagina [Table/Fig-1]. Under sedation foreign body was removed with artery, the forceps [Table/Fig-2,3], vagina was irrigated thoroughly with betadine solution and broad spectrum antibiotics were started following which child didn't have any vaginal discharge and became asymptomatic.

## DISCUSSION

Recurrent vaginal discharge is a common gynaecological complaint in children. It is mainly due to hypoestrogenic state of vaginal mucosa with lack of acidic pH which is the main predisposing factor causing mucosal invasion by pathogen [1]. Common causes of vaginal discharge in prepubertal age groups includes:- diaper dermatitis, bacterial vulvovaginitis, fungal vulvovaginitis, lichen sclerosis, eczema, rarely foreign body and sexual abuse [2]. Although vaginal foreign body is rare it should be suspected when a child has recurrent foul smelling or blood stained vaginal discharge [3]. Diagnostic procedures include non invasive imaging as plain radiography, ultrasonography and MRI. In case of negative findings vaginal irrigation and/or diagnostic vaginoscopy should be considered [4]. Thus, in vaginal discharge not responding to repeated antibiotic therapy, then foreign body should be suspected.

Foreign bodies are reported in 4% of girls under 13 years presenting with genitourinary complaints [5]. Foreign bodies can be accidentally inserted and/or by traumatic injury. Common vaginal foreign bodies are small fibrous material from clothing or carpet, small pieces of toilet paper, beads, safety pin, plastic stoppers [1,6]. Complications of unrecognised foreign body cause ulceration of vaginal wall, perforation, vesicovaginal fistula, vaginal stenosis due to scarring and adhesions, peritonitis after perforation or even complete obstruction of vagina [5]. Foreign body is usually suspected in long standing foul smelling discharge without any obvious cause 10-20% cases [5].

Approach to a suspected case of foreign body vagina is by good elaborate history taking, careful and thorough clinical examination, bimanual rectoabdominal examination. Investigations include routine blood count, culture and sensitivity of vaginal discharge, pelvic ultrasound, plain pelvic radiography and MRI. The use of Magnetic Resonance Imaging (MRI) has increased the localization of non metallic objects missed by USG and radiography [3,7]. Vaginoscopy with 4mm hysteroscopy under GA and vaginal irrigation with normal saline or betadine solution are used in detection and management of foreign body [8]. The child with vaginal foreign body should be assessed psychologically for underlying emotional and behavioral problem [6]. The possibility of sexual abuse should be kept in mind while treating.

P Pallavee et al., reported a case of chronic vaginal discharge in a 5-year-old, who had retained a foreign body in her vagina for 6-7 months. Removed by nephroscope (vaginroscope was not available), a yellowish structure covered with flakes of pus was



**[Table/Fig-1]:** Plain X-ray pelvis with radioopaque foreign body (hair clip) in vagina



**[Table/Fig-2]:** Plain X-ray pelvis with radioopaque foreign body (hair clip) in vagina  
**[Table/Fig-3]:** Foreign body (hair clip)

found in the vagina. It was removed by a small artery forceps and was found to be a groundnut with the shell intact and concluded children presenting with persistent purulent or bloody discharge per vaginum, unresponsive to general measures and medical therapy, the possibility of a vaginal foreign body should always be considered [9].

Dahiya P reported an intravaginal foreign body of long duration in an eight and a half year old girl who was suffering from blood stained vaginal discharge for 3 y. A vaginal examination performed under general anaesthesia revealed a foreign body (lead pencil). It was concluded that in cases of paediatric vaginitis one should always look for foreign body in vagina [10].

## CONCLUSION

In children presenting with persistent foul smelling or blood stained vaginal discharge not responding to general hygienic measures and antibiotic therapy, the possibility of a vaginal foreign body should be considered. Plain X-ray or USG is useful as a non invasive screening tool.

## REFERENCES

- [1] Merkley K. Vulvovaginitis and vaginal discharge in the pediatric patient. *J Emerg Nursing*. 2005;31:400-02.
- [2] Stricker T, Navratil F, Sennhauser FH. Vulvovaginitis in prepubertal girls. *Arch Dis Child*. 2003;88(4):324-26.
- [3] Deborah A, Simon BS, Berry S, et al. Recurrent, purulent vaginal discharge with long standing presence of a foreign body and vaginal stenosis. *J Pediatr Adolesc Gynecol*. 2003;16(6):361-63.
- [4] Smith UR, Berman DR, Quint EH. Premenarchal vaginal discharge, finding of procedures to rule out foreign bodies. *J Pediatr Adolesc Gynecol*. 2002;15(4):227-30.
- [5] Paradise JE, Willis ED. Probability of vaginal foreign body in girls with genital complaints. *Am J Dis Child*. 1985;139:472-76.
- [6] Adams PJ. Benign diseases of the female reproductive tract - symptoms and signs. In: Berek JS, editors. *Berek & Novak's Gynecology*, 14<sup>th</sup> Edition. Philadelphia: Lippincott William Wilkins; 2007:434-35.
- [7] Kihara M, Sato N, Kimura N, et al. Magnetic resonance imaging in the evaluation of vaginal foreign bodies in a young girl. *Arch Gynecol Obstet*. 2001;265(4):221-22.
- [1] Golan A, Lurie S, Sagiv R, Glezerman M. Continuous flow vaginoscopy in children and adolescents. *J Am Assoc Gynecol Laparosc*. 2000;7(4):526-28.
- [9] Pallavee P, Samal S, Sabita P. Foreign body in vagina: a cause of persistent vaginal discharge in children. *Int J Reprod Contracept Obstet Gynecol*. 2013;2:(issue 2):224-25
- [10] Dahiya P, Sangwan K, Khosala A, Seth N. Foreign body in vagina-an uncommon cause of vaginitis in children. *Indian J Pediatr*. 1999;(3):466-67.

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