# Rectorrhagia and Vaginal Discharge Caused by a Vaginal Foreign Body - A Case Report and Review of Literature

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#### ABSTRACT

An 8-year-old girl was taken to an outpatient clinic of surgery suffering from rectorrhagia and purulent, smelly vaginal discharge. Colonoscopy and biopsy were done before referring and sulfasalazine regime was administrated for probable colitis. The surgeon performed a rigid rectosigmoidoscopy under general anesthesia and no positive evidence was found. Having examined the hymen, it was found to be intact but a purulent discharge was observed. After drying the discharge, a black foreign body was seen in the bottom of the vagina and brought out by a fine forceps. It was a toy's wheel. The patient and her mother both denied foreign body abusing history. It was recommended she go for a psychological consultation. Generally speaking, all young patients suffering from vaginal or rectal bleeding with or without discharge should have their vagina checked for a foreign body. What is recommended in such cases is to undergo sonography or plain radiography before considering invasive or non-invasive procedures for evaluating anal and sigmoid abnormalities. Last but not least, a vaginal irrigation, precise examination of hymen, and posterior fossa can prove very useful for detecting simple vaginal bodies that can lead to various vaginal, rectal and abdominal complications.

Key Words: Foreign vaginal body, Vaginal discharge, Rectorrhagia

#### Introduction

Vaginal purulent discharge is a gynecologic problem usually caused by the lack of protective effect of estrogen on the vaginal mucosa<sup>1</sup> or other etiologic factors. Vaginal foreign body is a rare cause, usually leading to rectovaginal fistula when it remains for a long time without any therapeutic attention.<sup>2</sup> Urinary incontinence is another reported complication.<sup>3,4</sup> Fever, abdominal pain, and recurrent infections are among other complications resulting from vaginal foreign bodies.<sup>5</sup> Group A beta-hemolytic streptococcus, hemophilus influenza, and streptococcus aureus are involved in most cases.<sup>3,6</sup> Moreover, reports of foreign body insertions during masturbation, for contraceptive purposes, and sexual intercourse have been published.<sup>7</sup> Imaging techniques such as plain radiography, magnetic resonance imaging, and ultrasonography appear to be efficient diagnostic tools although negative finding of imaging cannot rule out a foreign body. This study reports the case of a young girl suffering from rectorrhagia and vaginal discharge due to a vaginal foreign body and reviews the body of literature on the issue.

# **Case Presentation**

An 8-year-old girl suffering from rectorrhagia was taken to an outpatient clinic. Her mother confirmed a purulent and smelly vaginal discharge from 2 months before. One

month before the visit, the patient had visited a pediatric gastroenterologist. After a colonoscopy and biopsy, she was diagnosed with colitis, so, the patient was recommended to undergo a sulfasalazine regime. On the second visit, a second colonoscopy was recommended but was refused by the girl's mother. The patient was referred to a surgeon and the physical examination showed a normal mucosa without any peripheral adenopathy and abdominal organomegaly. Dermatitis was found around the vaginal perineum. The surgeon planned a rigid rectosigmoidoscopy under general anesthesia and no positive evidence was found. After a careful hymen examination, it was found intact but purulent discharge was obvious; after drying the discharge, a black foreign body was seen in the bottom of the vagina and was brought out by a fine forceps. It was a toy's wheel (Fig.1). After intervention, metronidazole and



 $\textbf{Fig. 1.} \ \ \textbf{Foreign body removing following exploration}.$ 

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 Table 1

 Review of Reports about Intra-pelvic Fistula Due to Vaginal Foreign Bodies

_	Reference		Foreign Body	Age	Fistula	Surgical Method
First Author	Journal	Year Published				
Esmaeili <sup>9</sup>	Iran J Pediatr	2008	Cap of eyebrow pencil	7	Rectovaginal	Vaginal
Hirai <sup>10</sup>	Hiyokika Kiyo	2005	Hair spray cap	14	Vesicovaginal	Abdominovaginal
Rogenhofer <sup>20</sup>	Zentralbl Gynakol	2005	Aerosol cap	56	Rectovaginal	Vaginal
Fourie <sup>11</sup>	Int J Obstet Gynecol	2001	Aerosol cap	16	Vesicovaginal	Abdominal
Arikan N <sup>12</sup>	Br J Urol	2000	Aerosol cap	18	Vesicovaginal	Abdominal
O'Hanlan <sup>21</sup>	Am J Obstet Gynecol	1995	Bottle cap	19	Retroperitoneum	Abdominal
Dalela <sup>13</sup>	Br J Urol	1994	Cylindrical tin counter	13	Vesicovaginal	Abdominovaginal
Unda Urzaiz M <sup>14</sup>	Arch Esp Urol	1989	Child's toy	8	Vesicovaginal	Abdominal
Methfessel H <sup>22</sup>	Z Urol Nephrol	1987	Plastic splinter	18	Vesicovaginal	Vaginal
Gedeon <sup>23</sup>	Magy Noorv Lapja	1960	Stone	32	Rectovaginal and	Abdominal
	-				ureterovaginal	

ceftriaxone were administered with adequate dosage. At the time of the discharge, the patient had a healthy appearance. She and her mother denied a history of foreign body abuse. Psychological consultation was recommended.

#### Discussion

Reports of foreign vaginal bodies in children is rare but it can lead to severe complications such as intrapelvic fistula,<sup>4</sup> local infection, vaginal, or rectal discharge, hemorrhage, and dermatologic abnormalities<sup>8</sup> which need to be treated by surgical or non-invasive approaches. Table 1 lists many patients younger than 20 years with foreign vaginal bodies.<sup>7,9–14</sup> Usually, foreign vaginal bodies in children are inserted for sexual gratification, although having an orgasm is not always the main target.<sup>15</sup> Due to poor history in children, the diagnostic process of foreign vaginal bodies is highly complicated. Vaginal discharge, especially blood stained discharge, is a useful evidence for diagnosing foreign bodies. This may lead to misdiagnosis of similar cases by other differential diagnoses such as colitis, abdominal tuberculosis, 16 and urinary tract infection. Moreover, our case received sulphadiazine as the suggested antibiotic regime for the treatment of probable colitis misdiagnosed by colonoscopy, although imaging tools such as sonography were more accessible and could have contributed to an earlier and more reliable diagnosis. MRI is recommended as the best imaging tool for ruling out vaginal foreign bodies, however.<sup>17</sup> In this case, although the foreign body was accidentally discovered after the removal of vaginal discharge, at first her surgeon recommended a rigid sigmoidoscopy after persistent discharges followed antibiotic therapy because hymen was intact and appeared normally and no superficial vaginal defects were obvious. Generally because of the low prevalence of foreign vaginal bodies, especially when hymen is intact, anal and sigmoid are considered as the main sources of complications. Therefore, colonoscopy or sigmoidoscopy are planned as the first diagnosis, although the best procedure for detecting and removing foreign vaginal bodies is continuous flow vaginoscopy with 4 mm hysteroscope under general anesthesia and vaginal irrigation with normal saline. 18,19

### Conclusion

All young patients suffering from vaginal or rectal bleeding with or without discharge should have their vagina checked for a foreign body. What is recommended in such cases is to undergo sonography or simple radiography before considering invasive or no-invasive procedures for evaluating anal and sigmoid abnormalities. Also, a vaginal irrigation, precise examination of hymen, and posterior fossa can prove very useful for detecting simple vaginal bodies that can lead to various vaginal, rectal and abdominal complications.

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