

Vaginoscopy and vaginal foreign body in children: case report

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Abstract

The present case report shows the use of small diameter rigid hysteroscope in diagnostics and treatment of vaginal foreign body (i.e. alkaline battery) in a 12 years old girl, inserted by accident. In our study, the diagnostic and operative hysteroscopy confirmed to be ideal for removing foreign body, although respecting the postulates of minimally invasive gynecology.

Keywords: foreign body, vaginoscopy, hysteroscopy

Introduction

Vaginal foreign bodies can be cause of vulvovaginitis and vaginal bleeding in children. Small pieces of toilet paper, cotton, sand, small stones, parts of toys, hair pins are often causes of vaginal bleeding and prolonged, therapy resistant vulvovaginitis in children. Often vaginal secretions along with pus, local signs of irritation, feeling of discomfort, with or without bleeding are signs of vaginal foreign body^(1,2). Some authors investigated causes of vaginal bleeding in children over a 20 years period, concluding that 54% of all bleeding were caused by a local lesion and 21% of these had malignant genital tumors⁽³⁾. Others showed

similar results, with lower incidence of malignancies, 7.2%⁽⁴⁾.

Foreign bodies can also cause more extensive damaging to child's genitals through chemical reactions with delicate mucous tissue of vagina, corrosion and burning, including alkaline batteries^(5,6).

Due to the delicacy of the condition, a multidisciplinary approach is needed⁽⁷⁾.

In diagnostics, beside pelvic examination and ultrasound, vaginoscopy is usually performed, although much more sophisticated and expensive procedures like magnetic resonance imaging or computed tomography have been described in literature from our knowledge^(8,9).



Figure 1. Hysteroscopic picture of the battery inside the vagina

The removal is usually preformed by simply through the "entrance way", hymeneal orifices, although it can be limited by patient's age (small children) or social boundaries (virginity). Many different ways of extraction have been described, like vaginoscopy and in other cases hysteroscopy^(10,11). Furthermore, having in the view that this aspect is of major impact in some cultures, keeping hymen intact is also needed⁽¹¹⁾.

Case report

A 12 years old girl was admitted at University Hospital Osijek from Croatia for gynecology complaining on discomfort in pelvic region and claiming to have accidentally inserted a battery into vagina 36 hours prior to admittance. The child was accompanied by mother, and denied any traumatic injury or sexual abuse. External examination showed no signs of violent act. Hymen was intact, with no signs of perforation, laceration or bleeding. Transabdominal ultrasound confirmed the diagnosis of a foreign body into vagina.

Decision was made to perform diagnostic vaginoscopy using small diameter (3 mm) hys-

teroscope. Before the procedure, the child received only a mild sedation (i.e. diazepam 2.5 mg. iv.), although general anesthesia was an option in consideration. Hysteroscope serving as diagnostic vaginoscope was introduced through hymeneal orifice. As expected, the alkaline battery was placed with its narrow side towards the introitus of the vagina (Figure 1).

The battery was removed by reaching with grasper for top cap on upper side. The hymen remained intact, and no bleeding or any other intraoperative complication occurred. The child left the hospital two hours after the procedure, in a good condition.

Discussion and conclusion

Hysteroscopy is becoming one of the widest used gynecologic endoscopic methods.

Hysteroscope can be found practically in every better equipped gynecologic department and in many outpatients' clinics, since the office hysteroscopy is raising trend in gynecologic endoscopy.

The analyzed case shows the possibility of diagnostics through vaginoscopy using a small (i.e. only 3 mm) diameter hysterosco-

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Acest material promoțional este destinat profesioniștilor din domeniul sănătății.



Figure 2. Hysteroscopic picture of the battery inside the vagina



Figure 3. The battery which was removed in our case

pe, and removal of foreign body placed into vagina, before the serious complications occur. Diagnostic aspect is also of great importance. Both Aribarg and Phuphong (2003) and Hill and colleagues (1989) reported high incidence of malignant tumors (7.27% and 21%, respectively) hiding behind the vaginal bleeding. Hysteroscopy is the method that also enables taking bioptic samples with magnification from the camera^(3,4).

In our case, time between insertion and removal was, fortunately, insufficient for serious complications (like corrosion) to occur and the procedure was realized only in mild sedation, thus avoiding possible side effects of general anesthesia.

The diagnostic and operative vaginoscopy proved to be ideal for removing foreign bodies in similar cases, leaving the hymen intact and respecting the postulates of minimally invasive gynecology.

The procedure is simple, painless, short, non-aggressive and it can be realized without anesthesia, which also reduces the risk of post-operative complications to a minimum.

It is necessary to emphasize the role of vaginoscopy using small diameter hysteroscope in a child with vaginal bleeding due to possibility of exclusion of local vaginal lesions or other possible pathology, also making the examination efficient and cost effective option. ■

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