



Research Letter

Diagnostic dilemma of long-retained vaginal foreign body: Value of MRI

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Dear Editor,

We present an interesting MRI image and an atypical clinical case of long-retained vaginal foreign body.

A 10-year-old girl was referred to us for persistent smelly and bloody leukorrhea with itching and vulvar irritation refractory to local treatment (antifungal and antibiotic). Clinical examination

revealed an annular hymen. Transabdominal ultrasound identified an echogenic image in the upper part of the vagina. A first vaginotomy performed under general anesthesia looking for a foreign body revealed a vaginal adhesion hiding the cervix (Fig. 1). MRI was then performed to detect any vaginal malformations and revealed a very smooth image in the upper part of the vagina that could only correspond to a foreign body (Fig. 2). The vaginal adhesion was released via a vaginal approach, which allowed extraction of the foreign body (a plastic doll's house glass) (Fig. 3). The cervix was normal. Despite repeated questioning, the child and the family did



Fig. 1. Vaginoscopy. Vaginal adhesion hiding the cervix on the right side. Flap on the left side hiding a small orifice leading to the cavity containing the foreign body.



Fig. 2. Coronal MRI T2-weighted sequence. T2-hypointense image in the upper part of the vagina corresponding to the foreign body.

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Fig. 3. Picture of the foreign body. Plastic doll's house glass more than 2 cm long.

not remember this toy that had been present in the vagina for several years.

Recurrent vaginal discharge is a common reason for pediatric consultation. Recurrent smelly and bloody discharge should raise the suspicion of persistent vaginal foreign body [1,2]. An examination under anesthesia and vaginoscopy are traditionally recommended

for identification and extraction of the foreign body [3]. Although the possibility of sexual abuse must be investigated [4], the foreign body is usually a toy that accidentally enters the vagina while playing without the girl having any memory of having placed the object in her vagina. Prolonged retention of a vaginal foreign body can exceptionally cause vaginal adhesions [5] that can prevent natural elimination of the foreign body and cause persistent symptoms. The diagnosis of vaginal foreign body is usually established during clinical examination or vaginoscopy, but may be facilitated by ultrasound, CT or MRI in complicated cases. Although rare, possible complications related to long-retained foreign body such as pelvic abscess and fistula should be concerned and evaluated before removal, which were possibly been identified in MRI study.

Conflict of interest statement

The authors report no conflict of interest.

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