

CLINICAL IMAGE

Imperforate hymen due to vaginal hypoplasia presenting as an acute abdomen in adolescence

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Abstract

Imperforate hymen due to vaginal hypoplasia is a rare condition but should be considered as a differential diagnosis in patients complaining of abdominal pain.

KEYWORDS

imperforate hymen, menstrual molimina, vaginal hypoplasia

1 | CASE DESCRIPTION

Imperforate hymen due to vaginal hypoplasia is a rare condition but should be considered in the differential diagnosis of acute abdomen in adolescence (especially, menarche's characteristic age) that presents with symptoms and signs of low back pain, urinary retention, and menstruation absence.

A 12-year-old girl visited our hospital with severe pain in the lower right abdomen lasting for 2 days without any

lower back pain, urinary retention, and history of menarche. She had a history of lower middle abdominal pain 1 month ago. The pain resolved with laxative and analgesics. Anemia, history of infection, and breast tenderness were absent. Abdominal ultrasonography revealed a low-echoic mass with a diameter of 10 × 9 cm continuous with the uterine cavity on the posterior aspect of the uterus and bladder, and abdominal computed tomography revealed a mass-like lesion (Figure 1). Vulvar inspection showed a blockage of the vaginal opening. This mass indicated a hematometra by imperforate hymen,

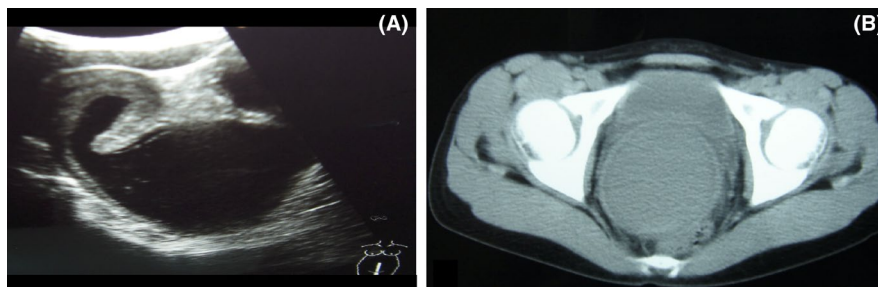


FIGURE 1 (A) Abdominal ultrasonography. On the dorsal side of the uterus and bladder, a low-echoic mass with a diameter of 10 × 9 cm continuous with the uterine cavity was observed. (B) Abdominal computed tomography. A mass-like lesion with a clear border of 8 cm was observed between the bladder and rectum

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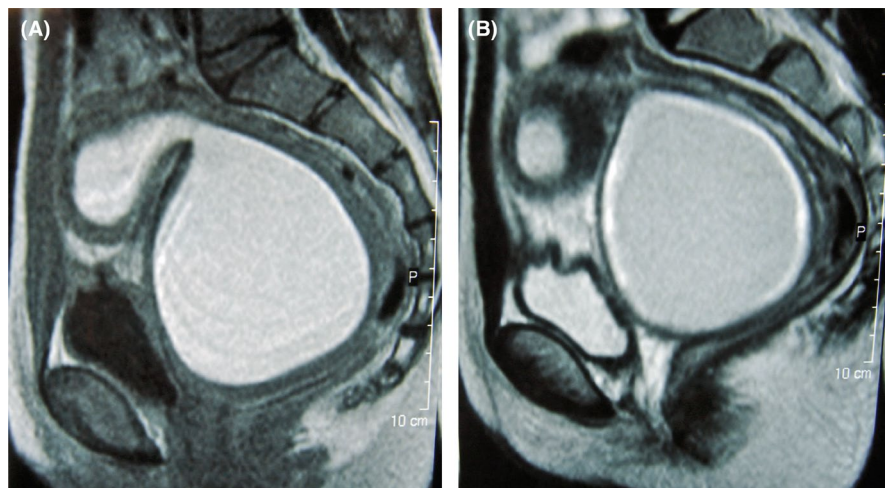


FIGURE 2 (A) Magnetic resonance imaging. A mass was observed between the bladder and rectum continuous from the uterine cavity with high signal for both T1 and T2. (B) The distance from the bottom of the mass to the perineum was about 4 cm, and hypoplasia of two-third of the lower vagina was suspected. No congenital malformations were found in the uterus

and subsequent magnetic resonance imaging (MRI) scans revealed that it was due to vaginal hypoplasia, because it was closed from the top to the bottom of the vagina (Figure 2). As the pain could be controlled with analgesics, a gynecologist and a plastic surgeon performed a vaginoplasty approximately 1 month later without any intra- or postoperative sequelae. The MRI was of key importance for identifying the cause of the hematometra.

Imperforate hymen is a rare condition that is typically diagnosed during adolescence after menarche, presenting with abdominal pain and amenorrhea.¹ Imperforate hymen should be considered a possibility in patients with abdominal pain, lower back pain, or urinary retention.²

DATE AVAILABILITY STATEMENT

All data generated and analyzed during this study are included in this manuscript.

ACKNOWLEDGEMENTS

We thank the patient and her parents for providing written permission to publish this manuscript.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

TK: involved in patient management and preparation of the manuscript. KA: involved in treatment. All authors read and approved the final manuscript.

ETHICAL APPROVAL AND PATIENT CONSENT

Written informed consent was obtained from the patient and her parents. This report is exempt from ethical approval because it is an observation report after the current care.

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