

A Concealed Cause: Urinary Retention and Pelvic Pain in an Adolescent

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Introduction

Imperforate hymen (IH) is a rare congenital anomaly resulting from incomplete hymenal membrane degeneration. Adolescents often present with nonspecific symptoms such as urinary retention, pelvic pain, and abdominal distension due to menstrual blood accumulation, leading to delayed diagnosis and potential complications. Despite its straightforward diagnosis and treatment, IH is frequently missed due to its low incidence, vague symptoms, or insufficient physical examination. Early recognition is essential to prevent issues like hydronephrosis and infection. In addition to IH, Müllerian duct anomalies, such as a septate uterus, are observed in a significant proportion of cases¹.

Case

A 14-year-old girl presented with a four-week history of cramping pelvic pain, worsening urinary retention, constipation, and primary amenorrhoea. Examination revealed a tense, bluish, bulging hymenal membrane consistent with haematocolpos. Ultrasound confirmed marked vaginal distension (86 mm AP diameter) with mild right-sided hydronephrosis but no uterine enlargement or renal abnormalities.

Management

A cruciate hymenotomy was performed, draining 1L of retained blood. The hymenal edges were excised and reinforced with vicryl sutures. The cervix was normal, and no additional anomalies were identified. Postoperative recovery was uneventful, and the patient was referred to the paediatric and adolescent gynaecology clinic for follow-up. MRI was arranged to assess for associated Müllerian or renal anomalies.

Discussion

This case highlights the importance of early diagnosis in adolescents with vague lower abdominal symptoms. Thorough clinical assessment, supported by imaging, facilitates prompt surgical management, preventing complications such as urinary obstruction and infection. Due to the rarity of IH and its nonspecific presentation, awareness and careful physical examination are crucial to avoid diagnostic delays and improve patient outcomes.

References

1. Lazanyi M, Grover SR. Imperforate hymen: Retrospective review from a single tertiary centre of presenting symptoms and diagnostic process. *J Paediatr Child Health*. 2020;56(1):90-93. doi:10.1111/jpc.14501

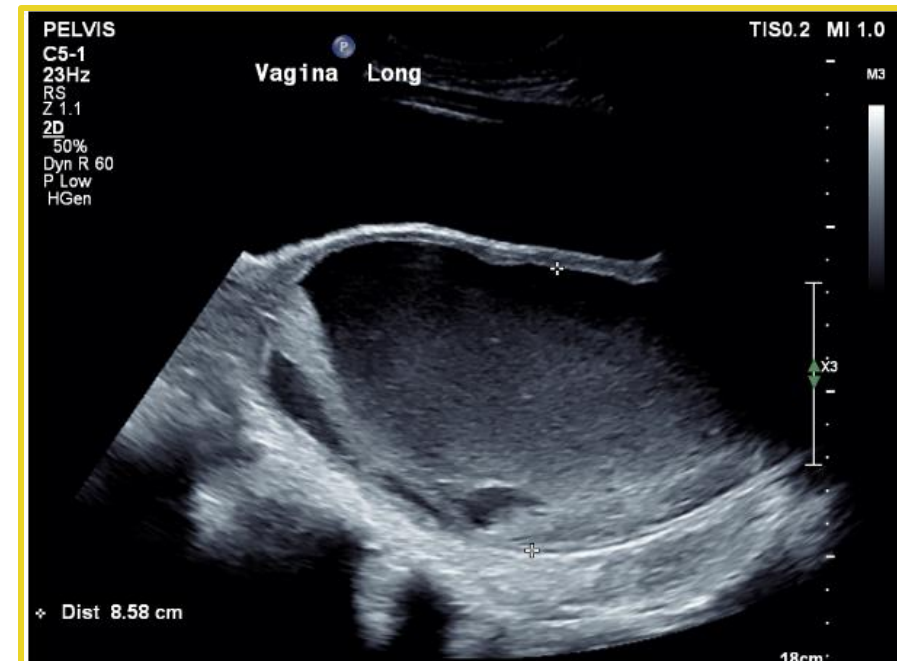


Figure 1: Transabdominal pelvic ultrasound showing haematocolpos