



0196-0644/\$-see front matter

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<https://doi.org/10.1016/j.annemergmed.2019.03.007>

Figure 1. A bluish bulging mass protruding from the introitus.

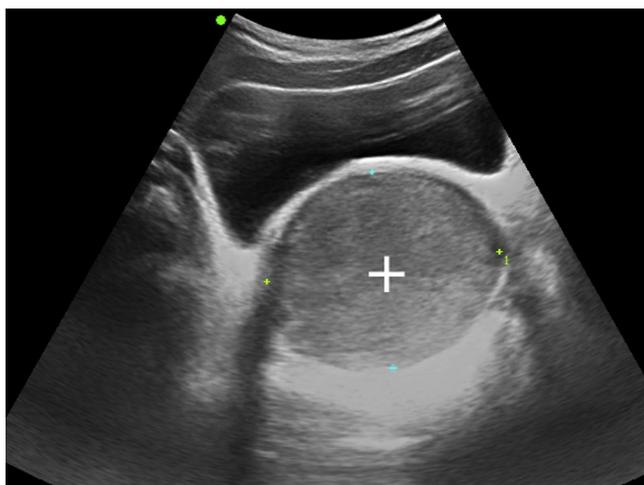


Figure 2. Transabdominal ultrasonographic image showing dilatation of the vagina (plus sign) as a result of fluid accumulation.



Figure 3. Abdominal CT with intravenous contrast (sagittal view) showing uterine distention (arrow) and intermediate high-density fluid filling the vagina (plus sign).

[Ann Emerg Med. 2019;74:e25-e26.]

A 13-year-old premenarcheal girl presented to the emergency department with a 1-day history of a protruding vaginal mass. She also reported lower abdominal discomfort and dysuria for 3 days. Physical examination showed a well-appearing and afebrile teenager with an unremarkable abdominal examination result. Perineal examination revealed a bluish bulging mass protruding from the introitus (Figure 1). Urinalysis and blood examination results were unremarkable. Pelvic ultrasonography and subsequent computed tomography (CT) were performed (Figures 2 and 3).

For the diagnosis and teaching points, see page e26.

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*(continued from p. e25)***DIAGNOSIS:**

Imperforate hymen with hematocolpometra. Imperforate hymen was first described by Ambroise Paré in 1633.¹ Its incidence rate is 0.01% to 0.1%.^{1,2} This congenital obstructive vaginal abnormality occurs as a result of incomplete degeneration of the central portion of the hymen. The catamenial blood accumulation manifests clinically with symptoms of amenorrhea, pelvic pain, hematocolpos, and urinary retention.^{2,3} This condition can be diagnosed on the basis of careful history taking and physical examination, with ultrasonographic confirmation. Early detection and surgical treatment can prevent ascending genitourinary infection, endometriosis, and infertility.^{2,3} The patient underwent hymenotomy, and 400 mL of coagulated blood was drained from the vagina and the uterus. She was discharged a day after the procedure, without complications.

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