Congenital imperforate hymen

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DESCRIPTION

A 16-year-old girl was referred to our gynaecology service, reporting of cyclic pelvic pain and primary amenorrhoea. The medical history had begun 4 years earlier with pelvic pain getting worse over time, disturbing her studies. Physical examination revealed a mass of 14 weeks’ gravid uterus. The patient’s secondary sexual characters were well developed (breasts, pubic and underarm hair). Examination of the vulva revealed an imperforate hymen. Digital examination of the rectum perceived a tense and compressible pelvic mass. The patient weighed 55 kg and was 165 cm tall, her blood pressure was 100/50 mm Hg and rate 76 bpm, her temperature was normal, 37°C.

Transabdominal ultrasonography and MRI confirmed the diagnosis: the imperforate hymen was 3 cm thick, haematocolpos measured 12×9.5 cm and haematometra was noted (figure 1). This malformation was classified as U0.C0.V3 according to the European Society of Human Reproduction and Embryology classification of congenital malformations.

We opted for a large excision of the hymen—because the membrane’s thickness measured 3 cm—and a plasty using the vaginal tissue to prevent hymen restenosis (figure 2).

Figure 1 Interference reflection microscopy (IRM)—imperforate hymen.

Figure 2 Schematic representation of vaginoplasty.

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A circular excision of the hymen was accomplished using advanced needle cautery, which led to the flow of 2 L of the material confined beyond the hymen. The lower segment of the vaginal wall was fixed to the introitus with surgical sutures (figures 3).

Postoperative analgesia was realised with lidocaine cream and ice packs. The surgical result was good and the patient had a normal menstruation cycle without pain.

**Learning points**

- Imperforate hymen occurs in \(~1/1000\) newborn girls. It is the most common obstructive anomaly of the female reproductive tract. It must be diagnosed at birth by the paediatrician; otherwise, it presents complications at puberty: blood collection inside the vaginal cavity, amenorrhoea and pelvic pain or a risk of secondary endometriosis.\(^1\)
- Transabdominal ultrasonography is sufficient for imperforate hymen diagnosis but MRI provides more details on hymen thickness enabling choice of the appropriate surgical technique: a thick hymen needs surgical resection; a thin hymen only needs a vertical incision.\(^1\)\(^2\)
- Fixing the vaginal wall to the introitus avoids restenosis and gives a complication-free postoperation result.\(^2\)\(^3\)

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**Patient consent** Obtained.

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**REFERENCES**