

HEMATOCOLPOS REVEALED BY NON-CYCLIC LOWER-BACK PAIN IN A PRE-MENARCHEAL GIRL

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Background

Hematocolpos is a rare condition in young girls that can be caused by imperforated hymen or vaginal agenesis. It is usually diagnosed at early puberty with cyclic abdominal pain and amenorrhoea.

Menarche is usually observed two years after the start of puberty; sometimes pre-menarcheal bleeding can occur, ranging from isolated premature menarche to spotting in course of puberty.

In case of imperforated hymen or vaginal anomaly, a pre-menarcheal uterine bleeding can cause hematocolpos, making diagnosis difficult.

Objective

We describe here the clinical case of a 12.8 years old teenage girl who experienced hematocolpos in the course of her puberty.

Methods

Complete clinical history, clinical and biological phenotypes were collected.

Results

Patient aged 12 years and 8 months described recurrent episodes of very intense lower-back pain that started 3 months before, lasting few hours, 3 days a week, every week.

She never had any genital bleeding. She was **Tanner stage III**.

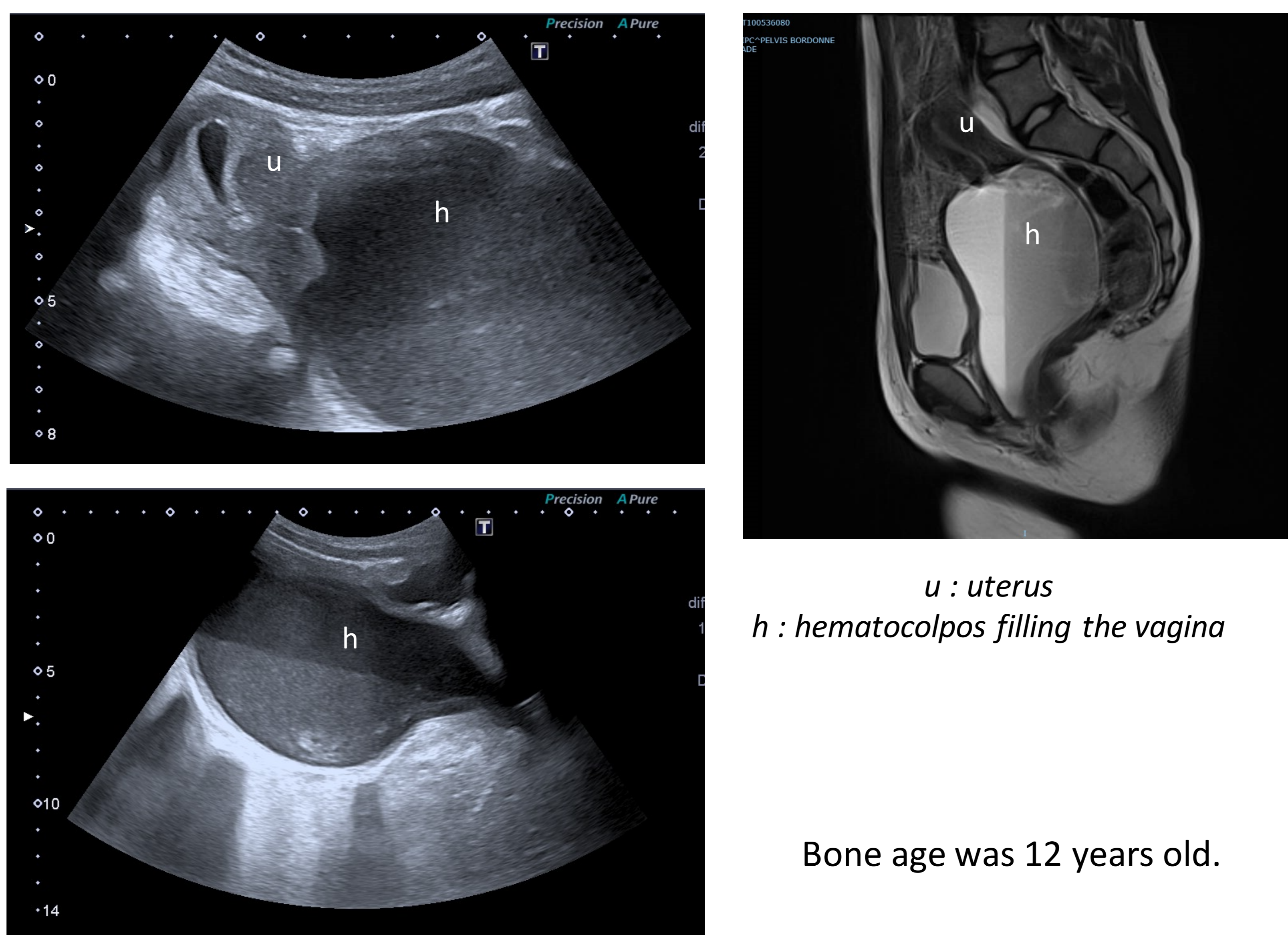
Abdominal palpation found a pelvic mass.

Fig 1. Vulvar inspection revealed an imperforated and tensed, but not bulging hymen.



Ultrasound imaging and MRI showed a 45 x 25 mm uterus without malformation, a 6.5 mm thick endometrium with a 6.4 mm hematometra, 4.8 and 6.0 mL ovaries, no hematosalpinx and 2 normal kidneys. A collection of 111 x 76 x 78 mm filled the vagina.

Fig 2 to 4. Pelvic ultrasound and MRI found a collection of 111 x 76 x 78 mm filling the vagina.



u : uterus
h : hematocolpos filling the vagina

Bone age was 12 years old.

Table 1. Gonadotropins were in the normal range for mid-puberty

FSH (UI/L)	3.73
LH (UI/L)	1.22
E2 (pg/mL)	23
Testosterone (ng/mL)	0.19
AMH (ng/mL)	8.82
Inhibine B (pg/mL)	32

Table 2. The GnRH hormone test showed ongoing physiologic central puberty.

	FSH (UI/L)	LH (UI/L)
T0 min	5.96	3.54
T30 min	15.14	33.91
T60 min	20.81	38.36
T120 min	19.87	32.35

Surgery (radial hymenotomy) confirmed the diagnosis of hematocolpos (aspiration of 400 mL of old blood). Additional hysteroscopy found no uterine or vaginal malformation.

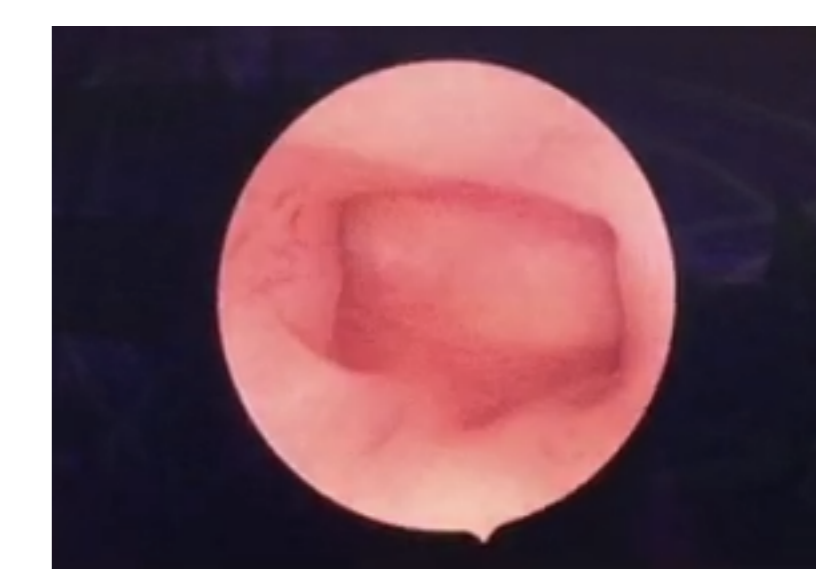


Fig 5. Hysteroscopy showing normal left and right tubal ostium and no uterine septa

Conclusion

- Hematocolpos should be considered even with **non-typical symptoms** in a pre-menarcheal girl, and can be the consequence of **uterine pre-menarcheal bleeding**.
- When an hematocolpos is diagnosed, physicians should check for **renal and uterine malformations**.

References

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