PORTUGUESE JOURNAL OF PEDIATRICS

PERMANYER

Check for updates

Ectopic ovary – an unexpected finding

Ovário ectópico – um achado inesperado

Paulo Santos-Correia[1a] and Alexandra Tavares-Ferreira[2b]*

[1]Hospital de São José; [2]Hospital Dona Estefânia. Centro Hospitalar e Universitário de Lisboa Central, Lisbon, Portugal

ORCID: [a]0000-0003-2902-3022; [b]0000-0002-2428-7320

Keypoints

What is known

- Ectopic ovary is a rare gynaecologic abnormality which can be congenital or acquired.
- The diagnose of ectopic ovary is usually difficult since most patients are asymptomatic.

What is added

- Ectopic ovary should be suspected in young patients with an absent pelvic ovary, namely in those with concurrent congenital renal defects.

A 14-year-old girl, with a prenatal diagnose of left pelvic multicystic dysplastic kidney, presented in our department for a follow-up ultrasound. The patient has been followed in our hospital by a paediatric nephrologist since birth. Previous ultrasounds reported a normal right kidney and a left pelvic multicystic dysplastic kidney, with no signs of vesicoureteral reflux on cystography.

She had no symptoms and no relevant family history. Urine and blood analysis were normal.

Physical examination was unremarkable, revealing developed secondary sexual characteristics.

Regarding the gynaecological history, the patient experienced menarche three months before this appointment. She reported that these first cycles were regular, with slight dysmenorrhea.

During an ultrasound examination, an elongated, well-circumscribed and hypoechogenic structure was depicted on the left flank, presenting with some small cystic images (Fig. 1). The left ovary was not depicted on its usual location (and it was never documented on previous ultrasounds).

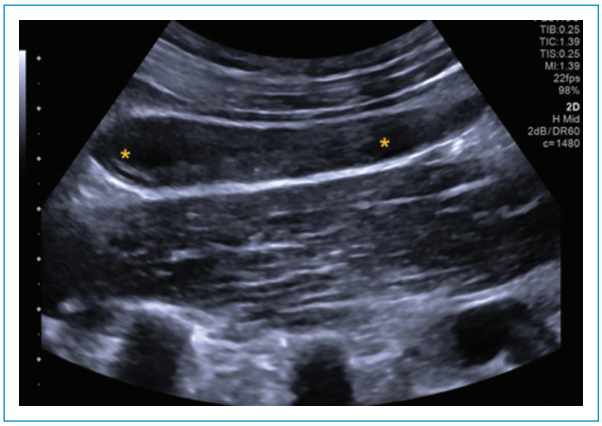

Figure 1. Ultrasound image showing an elongated, well-circumscribed and hypoechogenic structure of the left flank, with some small cystic images (*).

A complementary MR was performed for further characterization, showing an elongated, well-circumscribed structure on the left flank, measuring 84 mm of greatest

***Correspondence:**
Paulo Santos-Correia
E-mail: paulocorreia05@gmail.com

Received: 11-11-2023
Accepted: 13-11-2023
https://pjp.spp.pt

Available online: 07-02-2024
Port J Pediatr. 2024;55(1):66-68
DOI: 10.24875/PJP.M23000126

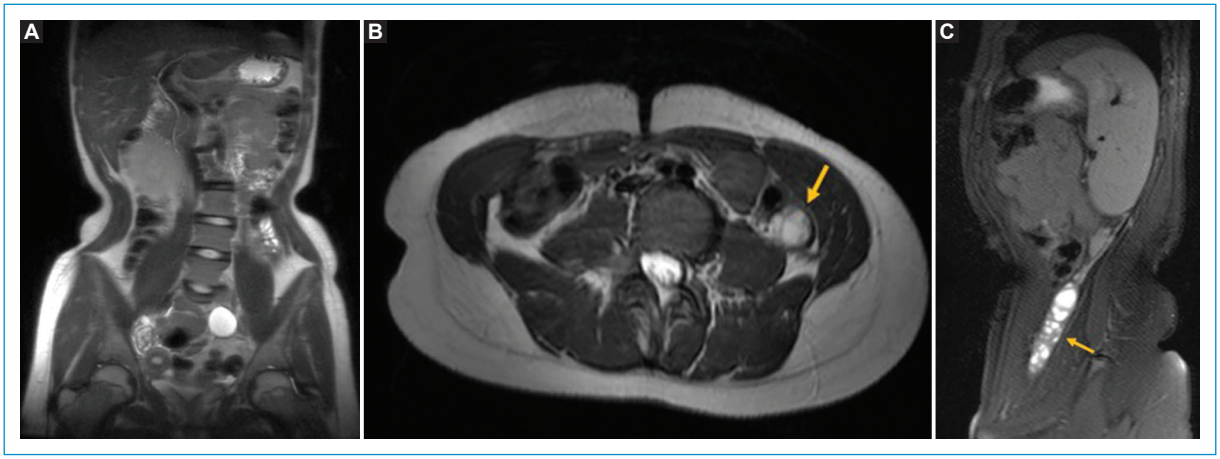

Figure 2. Ectopic ovary. Coronal **(A)**, axial **(B)** T2-weighted and sagittal **(C)** fat-suppressed T2-weighted images showing an elongated, well-circumscribed structure on the left flank (yellow arrow). The right ovary is identified on the pelvis (black arrow) as well as the pelvic multicystic dysplastic kidney (*). An unicornuate uterus is also depicted (yellow arrow-head).

longitudinal diameter. This structure presented with multicystic appearance, resembling an ovary with follicles, the largest being 14 mm (Fig. 2). These imaging findings were consistent with a left ectopic ovary.

Pelvic assessment confirmed the absence of the left ovary (Figs. 2 and 3) and depicted a right deviated uterine cavity, probably an unicornuate uterus lacking a rudimentary horn (Fig. 2). According to the European Society of Human Reproduction and Embryology (ESHRE) and the European Society for Gynaecological Endoscopy (ESGE) with consensus on the classification of female genital tract congenital anomalies, this anomaly was classified as U4bC0V0 (Fig. 4)[1].

The MR also confirmed the presence of a left pelvic multicystic dysplastic kidney and depicted a normal right kidney in the standard location (Fig. 3).

Ectopic ovary is a rare gynaecologic abnormality, characterized to be located above the level of the common iliac vessels, with less than 50 cases reported in the literature since 1959[2,3]. The estimated prevalence of ectopic ovaries among gynaecologic admissions sets between 1:29 0000 to 1:93 0000[2,4].

They can be classified as congenital or acquired, the later accounting for most cases. In fact, Lachman and Berman found that almost 50% of the reported cases since 1959 were diagnosed in patients with previous pelvic surgery, making our case even rarer[5].

The diagnose of ectopic ovary is difficult since most patients are asymptomatic. However, patients can present with menstrual irregularities, infertility or abdominal pain[3]. Ectopic ovaries can also have an acute presentation (eg. mimicking an appendicitis), or mimic intraperitoneal tumours[3,4].

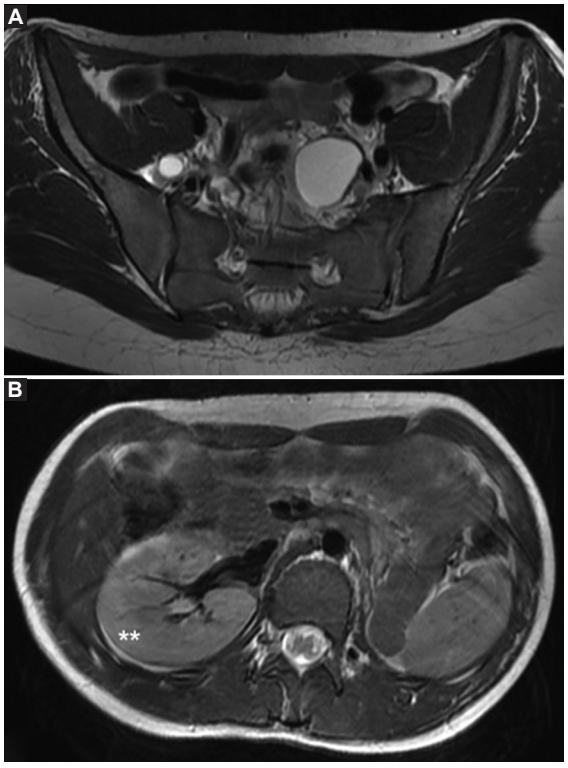

Figure 3. Additional findings. Axial T2-weighted image of the pelvis **(A)** shows a cystic lesion on the left (*) corresponding to the multicystic dysplastic kidney. A normal right ovary is depicted (arrow). Axial T2-weighted image of the upper abdomen **(B)** reveals a normal right kidney (**) and an absent left kidney.

Associations with renal abnormalities have been described, given their common embryologic origin[3].

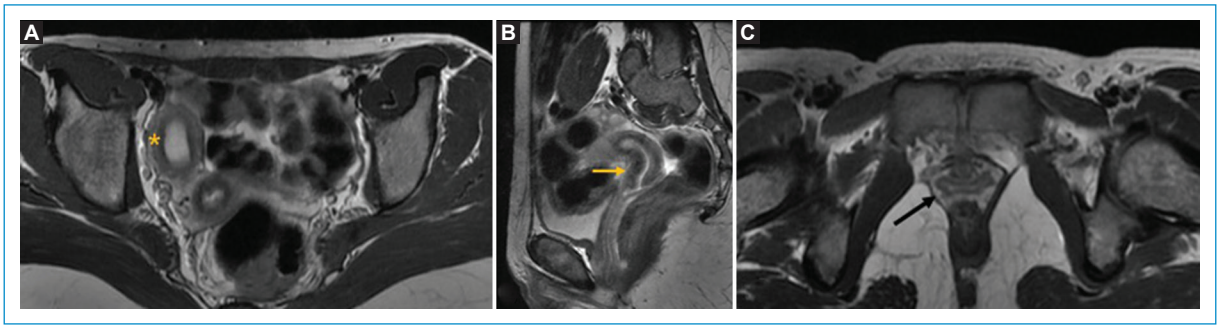

Figure 4. Uterine malformation. Axial T2-weighted image of the pelvis **(A)** shows a right deviated, unicornuate uterus (yellow star), without a rudimentary horn. Sagittal T2-weighted image of the pelvis **(B)** reveals an unilateral cervix (yellow arrow). Axial T2-weighted image of the pelvis at a lower level **(C)**, depicts a normal vagina (black arrow).

The diagnosis can be made by ultrasound, but MR is the best imaging modality to assess ectopic ovaries, given its excellent soft tissue contrast and its ability to diagnose concurrent uterine and renal anomalies.

Given its low prevalence, there are not many published studies concerning ectopic ovary management; however, whenever treatment is required, surgery remains the gold-standard[3,4]. The best management option should be achieved by a multidisciplinary board[4].

Funding

None.

Conflicts of interest

None.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

Use of artificial intelligence for generating text. The authors declare that they have not used any type of generative artificial intelligence for the writing of this manuscript, nor for the creation of images, graphics, tables, or their corresponding captions.

References

1. Grimbizis GF, Gordts S, Sardo AS, Brucker S, Angelis C, et al. The ESHRE/ESGE consensus on the classification of female genital tract. 2013;28(8):2032-44. (PMID:23771171)
2. Watkins BP, Kothari SN. True ectopic ovary: a case and review. Arch Gynecol Obs. 2004;(269):145-6. (PMID: 14557889)
3. Kollia P, Kounoudes C, Veloudis G, Giannakou N, Gourgiotis S. True ectopic ovary in the right iliac fossa mimicking acute appendicitis and associated with ipsilateral renal agenesis. J Obstet Gynaecol Res. 2014;40(3):858-61. (PMID: 24320118)
4. Pan J, Wang S, Wang H, Fan Z. A Rare Ectopic Ovary Mimicking Colon Sigmoideum Mesenchymoma Presenting as an Intestinal Mesenchymoma. Front Oncol. 2019;9(580):1-4. (PMID: 31334114)
5. Lachman MF BM. The ectopic ovary: A case report and review of the literature. Arch Pathol Lab Med. 1991;(115):233-4 (PMID: 2001159)