Incidental urothelial rest within the vermiform appendix of a paediatric male patient: an extremely rare entity

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DESCRIPTION

A paediatric male patient presented with signs and symptoms of acute appendicitis and was treated with laparoscopic appendectomy. Histopathology confirmed acute appendicitis with transmural inflammation and serositis. Additionally, histopathological examination revealed an incidental, well-circumscribed epithelial rest within the appendiceal serosa ([figure 1](#)). The rest consisted of cuboidal cells with round to oval nuclei and small nucleoli. No atypia or mitotic activity was present. Immunohistochemistry was positive for p63 and GATA-3, confirming urothelial differentiation ([figure 2](#)). Urothelial rests are common, benign, frequently incidental findings within the female gynaecological tract, where they are known as Walthard rests.¹ Additionally, Walthard rests have been reported in male genitourinary organs, including the epididymis, tunica albuginea, testis and spermatic cord.² However, they are extremely rare within the vermiform appendix, with only two previously reported cases; one in a 28-year-old woman,¹ and the other in a paediatric patient without a reported sex or age.³ To our knowledge, this case represents the first definitive report of a urothelial rest within the vermiform appendix of a paediatric male patient.

Walthard rests were originally described by Max Walthard in 1903. Since then, multiple theories have been proposed to describe the origin of Walthard rests, including mesothelial metaplasia, metaplastic urothelium and Müllerian remnants.² Immunohistochemistry can be used to confirm the urothelial differentiation. To render a diagnosis of a Walthard rest, no significant atypia, atypical mitotic figures

Figure 2 (A) 20x. P63 immunohistochemistry highlights the urothelial rest. (B) 20x. GATA-3 immunohistochemistry highlights the urothelial rest.

or tissue invasion can be present. Recognising the benign nature of these lesions is imperative to the patients' management, as no further treatment is required.

Learning points

- ▶ Urothelial rests are common, benign entities in the female gynaecological tract, but are extremely rare within the vermiform appendix.
- ▶ Recognising the benign nature of this lesion is imperative, as no further treatment is required.

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Figure 1 (A) H&E, 2x. Acute appendicitis and serositis with a urothelial rest within the serosa (arrow). (B) H&E, 20x. Urothelial rest within the serosa shows cuboidal cells, round to oval nuclei, small nucleoli, and NO atypia or mitotic figures.

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