**EP20.01 Tail Gut Cyst masquerading as endometriosis: case report**

Ahmad S¹, Thottungal A¹, Lo G², Hodder R², Karthigasu K³, Barwood N⁴, Jameson K⁵ (Western Australia)


**Background**

Tail gut cysts (TGC) are rare developmental anomalies, due to the remnant embryonic hindgut, occurring in the pre-sacral space. They are uncommon, and most reports relate to only one or a few cases. They may be asymptomatic or a source of chronic perirectal symptoms. Mean age of presentation is 35 years with a female to male ratio of 5:1. They could present diagnostic and management dilemmas. We report the identification of two TGC by a combination of transvaginal sonography and sonovaginography (SVG).

**Methods**

We identified two cases of TGC diagnosed by ultrasound examination at our clinic. The diagnosis was confirmed with additional imaging and or at surgery.

**Results**

The two cases reported below were referred for pelvic pain symptoms with a suspicion of endometriosis in 28 and 36 year old nulliparous females. Initial modality of investigation was transvaginal sonography which was successful in identifying the TGC as cystic lesions with low level internal echoes mimicking endometriomas. The cystic lesions were related to the posterior wall of the rectum. SVG done in both the patients confirmed the suspicion of TGC and also ruled out any identifiable foci of deep infiltrating endometriosis. Both patients went on to have MRI to confirm the diagnosis.

One patient underwent drainage and excision of the cyst via a posterior approach (Kraske procedure). The histopathology confirmed the diagnosis of a tail gut cyst. The second patient opted for conservative management after a PET scan reported the lesion as benign. She remains on surveillance PET scans.

**Discussion**

The pre-sacral (retro-rectal) space can be defined as the potential space bounded by the rectum anteriorly, the sacrum posteriorly, the peritoneal reflection superiority (at the level of the junction of the second and third sacral segments), and the levators ani and coccygeus muscles inferiorly. The ureters and iliac vessels are the lateral margins. As the embryo starts to fold inward during the 4th week of gestation to enclose the future gut, the cloacal membrane comes to lie ventral and encloses the caudal portion distal to the eventual hindgut and is called a tailgut. The tailgut normally regresses by the 6th week of gestation. If the mucous secreting remnant fail to regress, a tail gut cyst is formed.

TGC manifest with a variety of symptoms including constipation, pelvic pain, dysuria and dyspareunia in middle-aged women. Most cysts may be palpated clinically. In our small series of two cases, the use of specialised focussed trans-vaginal sonography was successful in diagnosing this rare entity. We wish to highlight the fact that in our series, the presentation,

**Conclusion**

Tail gut cyst can mimic endometriosis in females. Transvaginal sonography is a valuable tool in correctly identifying tail gut cyst.

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**References**
