Excision of a recurrent retrorectal tailgut cyst after 58 years

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DESCRIPTION

A 58-year-old woman presented to the outpatient department with a 6-month history of recurrent discharging abscesses in the sacral area. Of note in her past surgical history, she underwent excision of a presacral mass as an infant. On examination a 2×2 cm fistula opening was visible at the left lateral aspect of an old transverse scar midway between her anal canal and coccyx. On digital rectal examination a smooth, soft 6–8 cm mass was palpable posteriorly to the right. This mass was partially mobile and it was possible to get above the upper extent of the mass and 'hook' it downwards. Due to her history of pre-sacral surgery as an infant, an MRI was performed demonstrating a 9.3×8.6×10 cm, predominantly fat containing mass (see figures 1 and 2). Because of the recent change in the mass with abscess and fistula formation, a biopsy, through the fistula tract, was performed to exclude malignant change. Biopsy results demonstrated chronic inflammatory change only. The mass was excised through a posterior approach (patient positioned prone, jack-knife) excising the old transverse scar and fistula tract. As the mass was intimately involved with the coccyx, this was taken en-bloc with the tumour. The mass was also dissected carefully off the posterior wall of the rectum. An underwater leak test was performed at the end of the procedure that confirmed no rectal injury. The retrorectal defect was closed in layers over a suction drain. Histopathology from the mass demonstrated a benign tailgut cyst, fully excised (see figure 3). The patient made an excellent recovery and the drain was removed on day 7 post-operation in the clinic. On her 6th-week visit, her wound had fully healed with normal bowel function and no episodes of faecal incontinence.

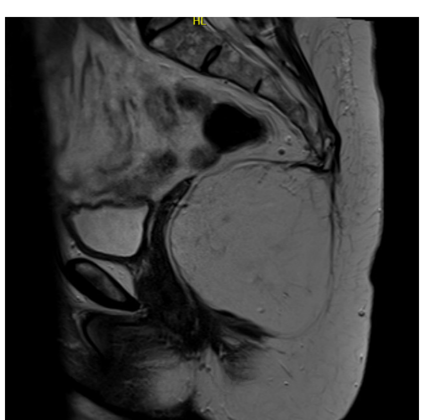

Figure 1 Preoperative MRI (sagittal slice) demonstrating a right perirectal mass measuring 9.3×8.6×10 cm. The mass is tethered to the coccygeal tip.

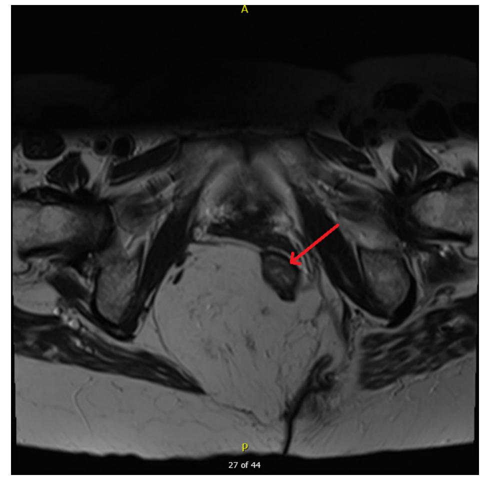

Figure 2 MRI axial view of the mass showing displacement of the lower rectum posteriorly to the left (red arrow). The mass was situated above the levator muscles and not involving the sphincter complex.

Retrorectal tumours are a group of rare masses of the presacral space. They are a very heterogeneous group of tumours and are classified as congenital, neurogenic, osseous, inflammatory and miscellaneous.[1] The most common benign tumour is the congenital developmental tailgut cyst caused by incomplete involution of the embryonic tailgut.[2] These can be lined by a variety of cell types, most commonly columnar, transitional and squamous.[3] The most common malignant tumour is a chordoma, which is thought to arise from remnants of the notochord. It is recommended to excise tailgut cysts if medically fit, as all developmental cysts carry malignant transformation potential, and cysts

Figure 3 Photograph of the excised tailgut cyst.

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may become symptomatic through abscess and fistula formation, as in our case. Preoperative biopsy is not always necessary and most retrorectal tumours can be excised on the basis of clinical findings and radiographic imaging alone. In our case a biopsy was performed due to the recurrent nature of this tumour and the recent transformative change.

Retrorectal tumours may be excised through a posterior approach, an abdominal approach or a combination. As a rule, if one can palpate the upper extent of the tumour on digital rectal examination and the tumour is below a transverse line running through the body at S4 on CT/MRI, then a posterior approach is likely to be successful.[4] Minimally invasive surgery, particularly robotic surgery, is being used more frequently to remove these tumours.[5] Recurrence of benign retrorectal tumours is not uncommon and is associated with incomplete primary excision and failure to remove the coccyx. Patients should be followed with physical and radiological examinations for this reason.

Learning points

- Retrorectal tailgut cysts should be removed where feasible due to their malignant transformation potential.
- Recurrence is not uncommon and is associated with incomplete primary excision and failure to remove the coccyx.
- The posterior approach is preferred where the tumour is below the level of S4 and the upper limit of the tumour can be palpated on a rectal examination.

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