Sacrococcygeal teratoma in an adult containing a mucinous adenocarcinoma

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DESCRIPTION

A 44-year-old woman presented to the spinal surgeons with mass over her sacrum. She was experiencing back pain, constipation and recent weight loss. MRI showed a 15 cm presacral mass displacing the rectosigmoid junction while being inseparable from S4 to the coccyx. In view of the anatomical considerations ([figure 1](#)), the patient was counselled preoperatively regarding the risk of parasympathetic nerve damage and neurological sequelae affecting the bladder and bowel. The patient was operated on in the prone position. An elliptical incision allowed development of a tissue plane over the cyst. The lower part of the coccyx and sacrum was excised. The cyst was dissected away from the anal sphincter and rectal serosa, both of which remained intact. Primary closer was achieved. The woman made an uneventful post-operative recovery with no neurological deficit.

Histology showed a moderately differentiated intestinal type mucinous adenocarcinoma arcing within a mature cystic teratoma ([figure 2](#)). The possibility of metastasis from the gastrointestinal tract was excluded clinically with colonoscopic surveillance. Sacrococcygeal tumours are one of the most common neoplasms in neonates with an incidence of 1 in 40 000 live births.¹ In adults, it is a rare tumour that tends to occur within the pelvis rather than externally, which is more common in neonates.^{2,3} The majority are cystic in nature with approximately 1%–2% being malignant.⁴ Treatment is surgical with removal of the coccyx, allowing better clearance and reducing the risk of recurrence.⁵ β -Human Chorionic Gonadotropin (β -HCG) and α -fetoprotein (α FP) can help differentiate between immature and mature teratomas.

Figure 2 H&E slide adenocarcinoma with a cribriform and complex glandular architecture with extravasated mucin and background dysplastic epithelium.

Learning points

- ▶ It is always important to investigate and treat beyond the presenting complaint.
- ▶ The value of multidisciplinary surgical collaboration will increase the chances of successful management especially in rare conditions.

Malignant transformation within sacrococcygeal tumours is exceptionally rare, with only a few case reports noted.⁶

Contributors AJ was the lead consultant who planned and performed the procedure. JD and AMD collected and interpreted the data and wrote the case report. NS prepared/looked at the slides and provided the images.

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Figure 1 Sagittal view taken from T1-weighted MRI with gadolinium showing sacrococcygeal teratoma and relationship with surrounding anatomy.

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