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IMAGES IN UROGYNECOLOGY

Aggressive angiomyxoma presenting as posterior vaginal prolapse

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Introduction

Aggressive angiomyxoma is a rare, locally aggressive mesenchymal tumor that primarily occurs in the pelvis and perineum [1, 2]. Traditional management is wide local excision with clear margins [2]. The bulk of the neoplasm is typically embedded within the deep structures of the pelvis and perineum, which can lead to both delayed diagnosis and misdiagnosis as benign vulvar or perineal lesions [1, 3].

Case

A 44-year-old woman presented with a 5-month history of worsening vaginal bulge, urinary incontinence with activity, and incomplete evacuation of stool requiring manual splinting. Medical history was significant for class I obesity. Physical examination was significant for positive supine cough stress test and stage 2 prolapse. On rectovaginal examination, a distinct 3- to 4-cm mass was noted separate from the rectum. Magnetic resonance imaging (MRI) showed an ill-defined mass within the rectovaginal septum, without infiltration into the rectum or vagina, measuring 6.3 × 3.3 × 2.6 cm with a nodular and infiltrative component extending 5 cm laterally into the left puborectalis muscle and ischiorectal fat pad (Fig. 1). Differential diagnosis included benign vaginal cyst, endometrioma, leiomyoma, and malignant neoplasm.

A wide resection of the mass by a surgeon experienced in pelvic floor disorders and vaginal cyst excision was performed intact. Findings at the time of surgery were consistent with the MRI, with no involvement of the rectum. A posterior colporrhaphy was then performed by plicating the overlying fibromuscular layer. Additionally, a mid-urethral sling was performed to address her stress urinary incontinence. The mass was

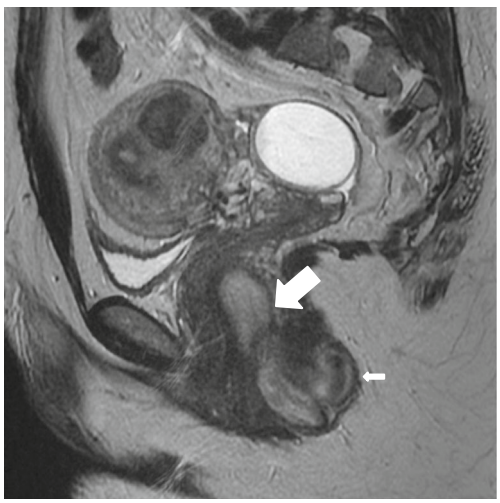

Fig. 1 Off-midline sagittal T2-weighted magnetic resonance image (MRI) showing ill-defined mass (*large arrow*) within the rectovaginal septum compressing the vagina anteriorly. The rectum was displaced slightly posterior (seen on axial images), with the posterior aspect of the mass extending into the adjacent ischiorectal fat (*small arrow*). Of note, MRI also showed an enlarged fibroid uterus

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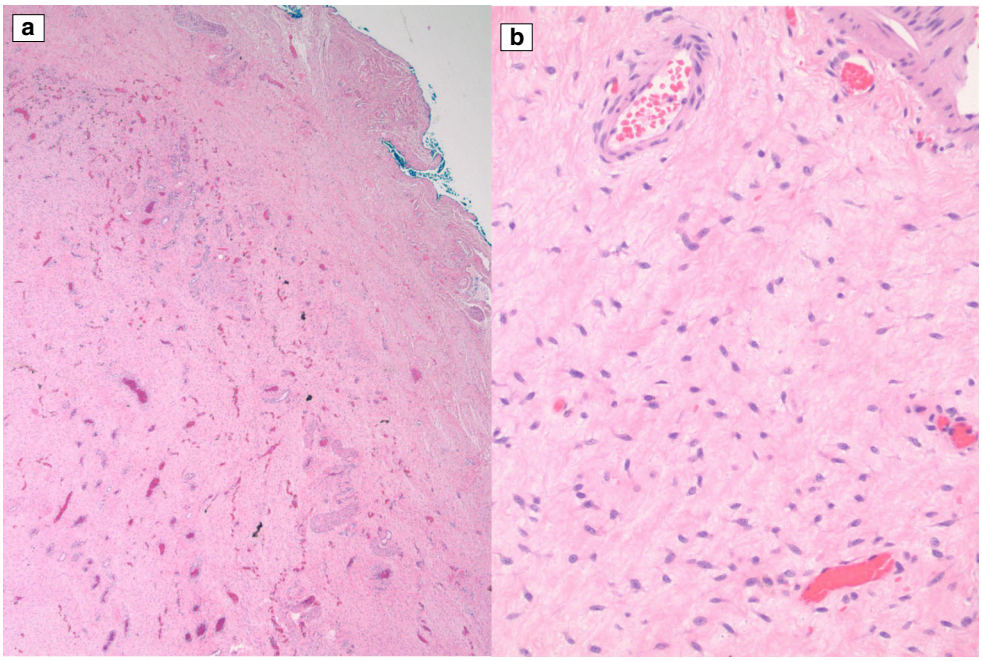

Fig. 2 **a** Hematoxylin and eosin staining was somewhat circumscribed, but an unencapsulated mass shown here ×2 original magnification. **b** On higher power, the mass contained bland spindled and stellate cells within a vascular fibromyxoid stroma. Blood vessels also showed peripheral hyalinization ×40 original magnification. There was no evidence of necrosis, mitotic activity, or malignant transformation

grossly solid, tan–pink in color, and well-circumscribed, with a pink, slightly vascular and gelatinous cut surface. Histopathology revealed proliferation of bland spindle and stellate cells within a vascular fibromyxoid stroma, as well as entrapped Mullerian glands suggestive of entrapped endometriosis without evidence of necrosis or malignancy (Figs. 2 and 3). Final diagnosis was consistent with aggressive angiomyxoma with negative margins.

The postoperative course was uncomplicated, and the patient was asymptomatic 1 month later. Surveillance monitoring after gynecologic oncology consultation included genetics consultation, and yearly MRI and pelvic examination.

Compliance with ethical standards

Conflicts of interest None.

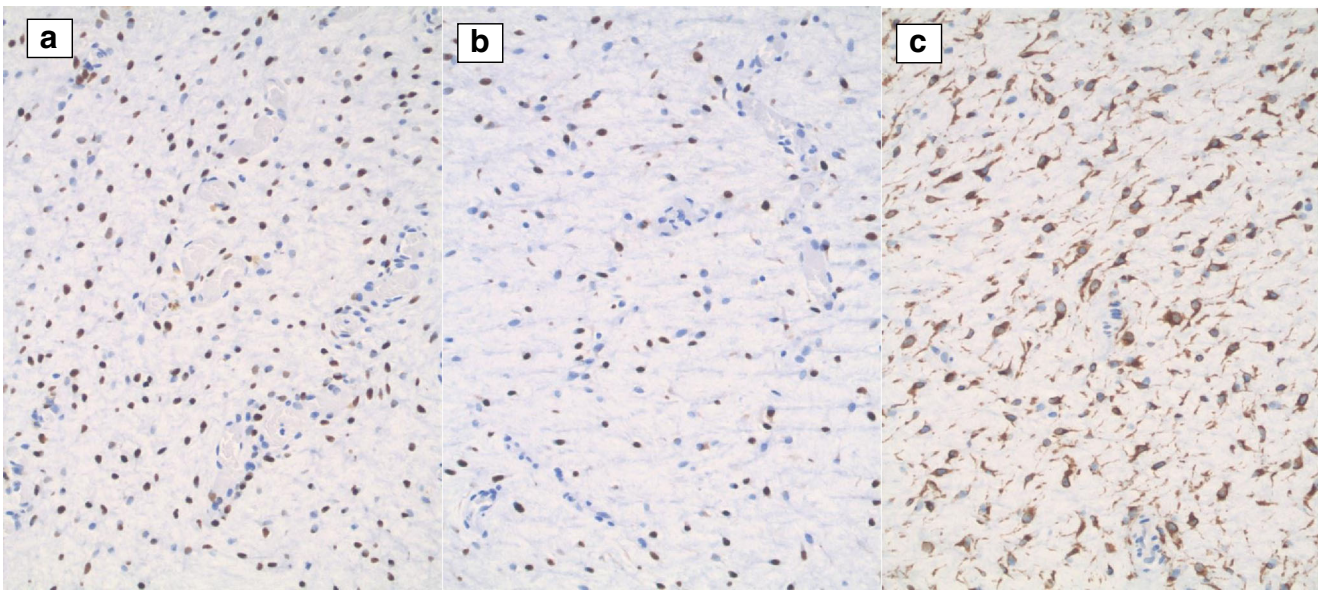

Fig. 3 Immunohistochemical expression of **a**estrogen receptor, **b** progesterone receptor, and **c** Desmin (×20 original magnification)

Consent Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

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