

LEIOMYOMA PRESENTING AS AN ANTERIOR VAGINAL MASS.

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INTRODUCTION:

Vaginal tumours are rare and may include papilloma, haemangioma, a polyp or rarely, a leiomyoma. Since the first case of a vaginal leiomyoma was described in 1733, only 300 cases have been reported. These tumours are thought to arise from Mullerian smooth muscle cells in the sub epithelium of the vagina and usually occur in the anterior vaginal wall, as in this case. Leiomyomas are benign mesenchymal tumours arising from smooth muscle components. Ectopic leiomyomas are rare but they have been described in the ovary and the vulva. Women may present with vaginal bleeding, abdominal pain, dyspareunia or urinary symptoms. Individuals may describe vaginal discomfort or have the sensation of an intravaginal lump. It may also be asymptomatic and only discovered incidentally during routine physical examination. Imaging with USS or MRI can confirm the vaginal origin of the lesion. Surgical excision by the vaginal approach is the mainstay of treatment. Follow up is required as the lesion may recur.

CASE PRESENTATION:

A woman in her late 40s was referred by her GP to the Gynaecology Department for assessment of a mass at the urethral opening. She reported a history of lower urinary symptoms such as an increased frequency and urgency. Her gynaecology history included irregular periods, menorrhagia, dyspareunia and urgency. She was perimenopausal and not taking HRT. She had no history of abnormal cervical cytology. An USS suggested an endometrial polyp. She underwent an EUS, hysteroscopy, transcervical resection of a fibroid polyp and Mirena coil insertion. Bimanual and speculum exam confirmed a normal cervix. On inspection of the perineum and vulva, a mass was palpable between the urinary meatus and the vaginal orifice. The mass was painless, mobile, firm and well circumscribed. It was <4cm. It was not suggestive of a urethrocele or a cystocele.

INVESTIGATIONS:

Laboratory investigations confirmed a microcytic anaemia [Hb 95g/L, MCV 69.2fl]. Urinalysis was negative. A TV USS showed a 41x33mm mixed echogenic, well circumscribed lesion anterior to the vaginal vault. **[Figure 1]** The appearances were suggestive of an unusually sited fibroid, fibroma or polyp. A MRI pelvis confirmed the aforementioned findings. **[Figure 2]**



Figure 1. TV USS.

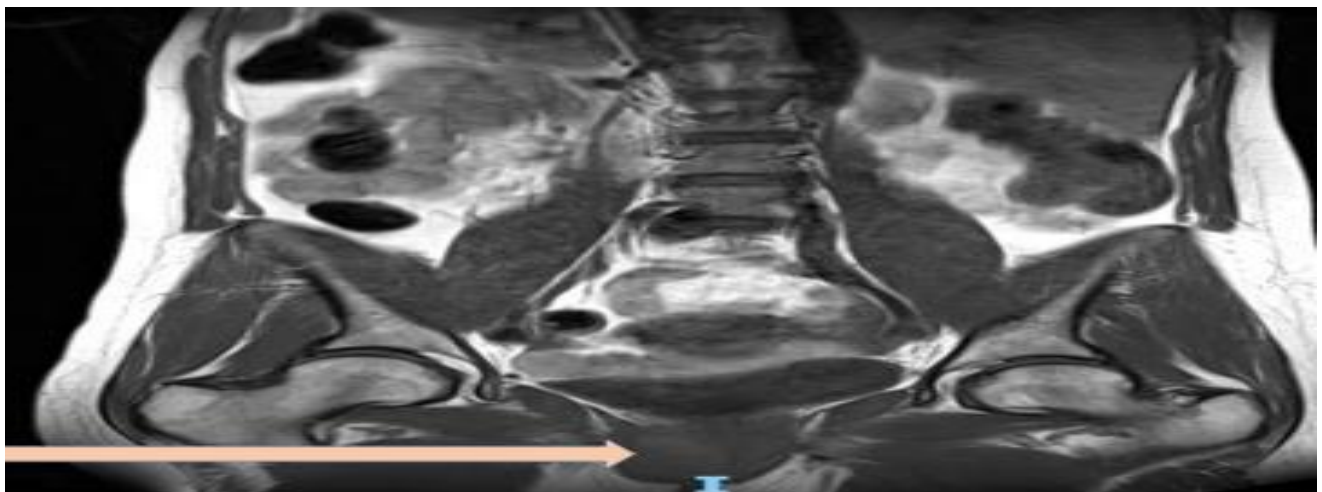


Figure 2. MRI Pelvis.

DIFFERENTIAL DIAGNOSIS:

A rigid cystoscopy was performed and it showed no evidence of urethral stenosis or a bladder mucosal lesion. The differential diagnosis included a polyp, a complicated skene gland cyst or leiomyoma, However, malignancy could not be excluded.

TREATMENT:

She commenced treatment with ferrous sulphate 200mgs bd. A biopsy was performed via the vaginal route, Microscopy showed squamous mucosa with an underlying oedematous well circumscribed nodule composed of spindle cells with bland nuclei and delicate interlacing cytoplasm. **[Figure 3,4]**

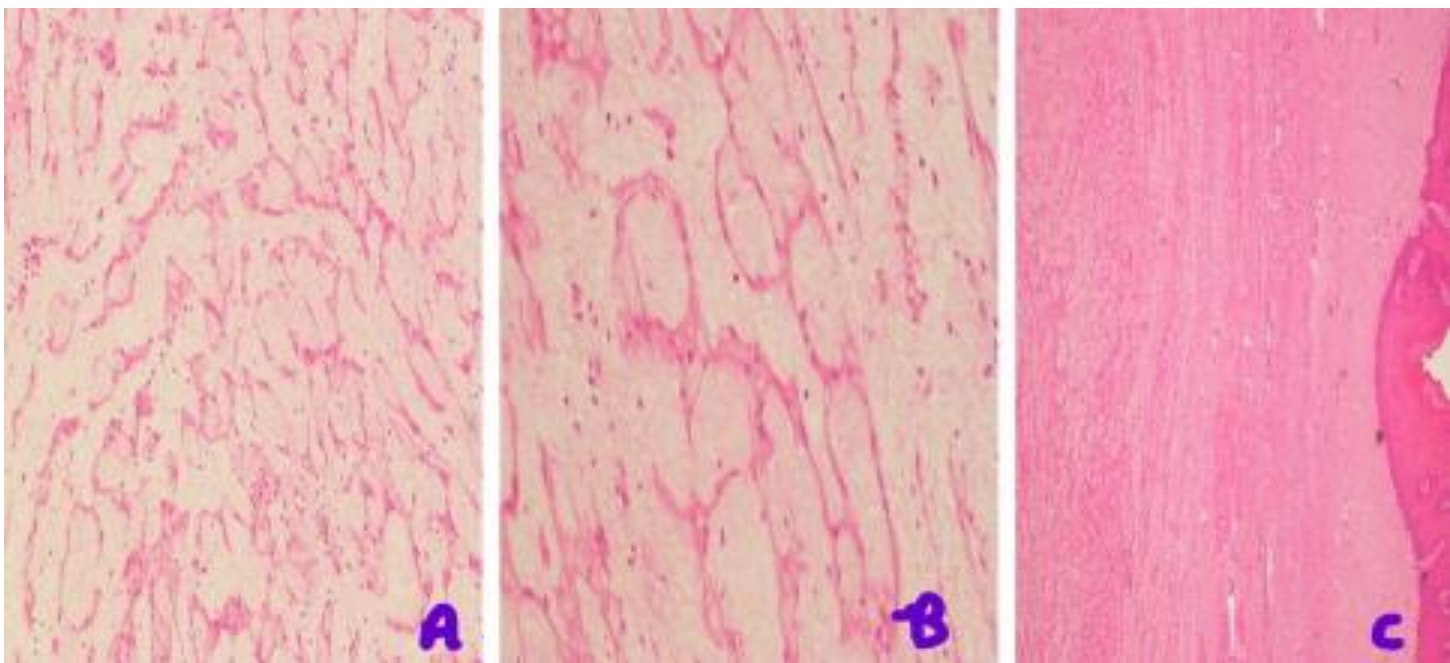


Figure 3.

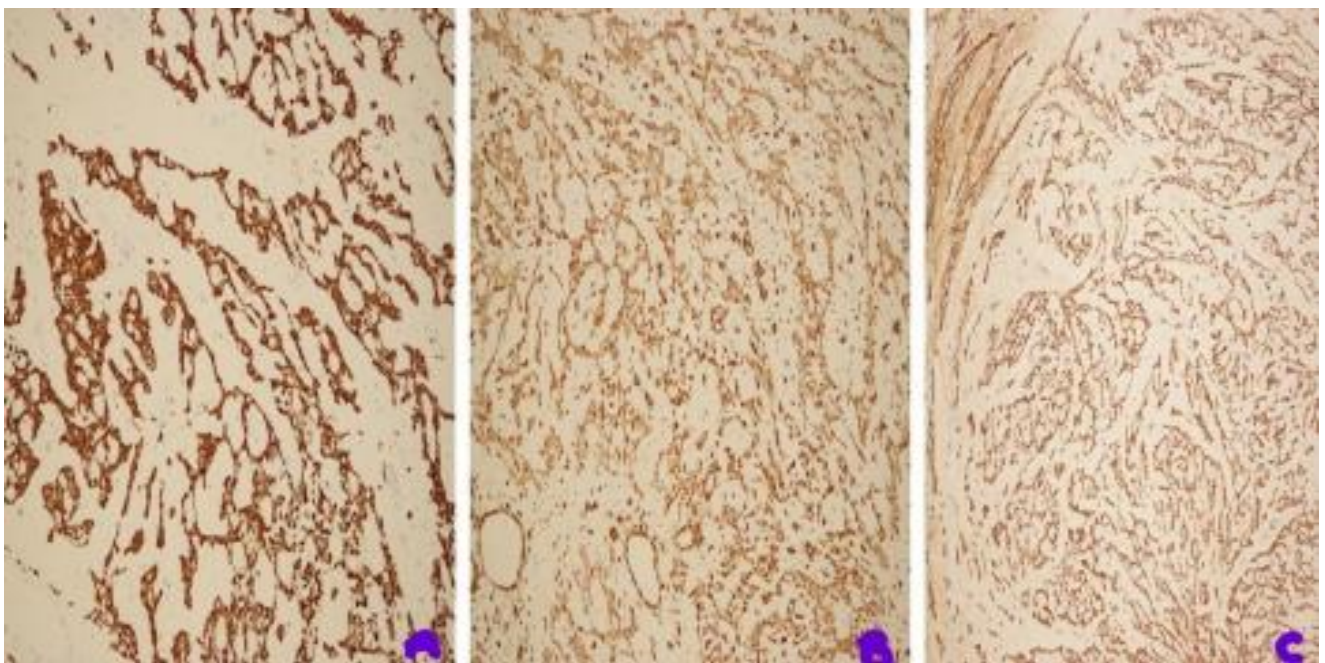


Figure 4.

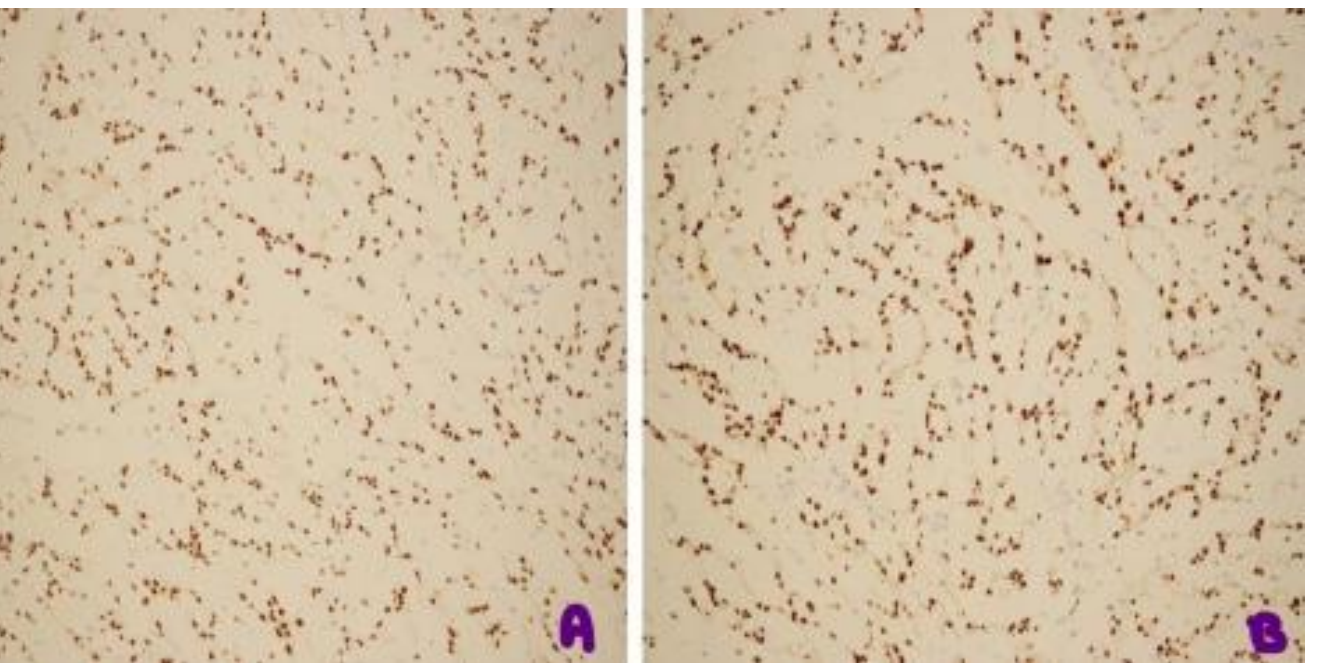


Figure 5.

OUTCOME AND FOLLOW-UP:

Surgical excision was performed. Spindle cells expressing vimentin, actin, desmin, oestrogen and progesterone receptors were present, confirming the diagnosis of a hydropic leiomyoma. **[Figure 5]**

DISCUSSION:

Vaginal leiomyoma was first described in 1733 by Denys de Leyden. Only 300 cases have been published globally. The first comprehensive reports were by Phillips in 1899 and Smith in 1902. Bennett and Erlich found only 9 cases in 50,000 surgical specimens and only 1 case in 15,000 autopsies performed at the John Hopkins Hospital. Leiomyoma is commonly found in the uterus. Imaging with USS and MRI can confirm the vaginal origin of the lesion. Some authors recommend a TV USS guided biopsy to help establish the diagnosis prior to surgery. Histopathological exam remains the gold standard of diagnosis. Immunostains are positive for desmin, h-caldesmon, smooth muscle actin and transgelin. The use of gonadotropin- releasinghormone analogues or selective progesterone receptor modu-lators to reduce tumour size or preoperative embolisation toreduce intraoperative bleeding have been suggested. Although the lesion is benign, incomplete resection and sarcomatous transformation have been reported.