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A COMMON TUMOUR AT AN UNCOMMON LOCATION.

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ABSTRACT Leiomyoma are one of the common benign tumors in the uterus. However, vaginal leiomyoma remain an uncommon entity with about 295 reported cases only. Here, we report a case of a 30-year-old multigravida, who presented with something coming out of vagina and per vaginum spotting. A physical examination, ultrasonography and MRI revealed a soft tissue mass in the anterior vaginal wall, trucut biopsy was also performed. Pervaginal removal of tumor was done, and histopathology report revealed a leiomyoma. Although a rare tumor, vaginal leiomyoma may present with a variety of clinical features and may be mistaken preoperatively for cervical fibroid. Removal of tumour by vaginal route, wherever possible, with subsequent histopathological examination appears to be the optimum management plan.

KEYWORDS : Leiomyoma, vaginal tumour, benign uterine tumour

INTRODUCTION

Tumors of vagina are rare which include hemangioma, papilloma, mucus polyp, and rarely leiomyoma. Vaginal leiomyoma remain an uncommon entity with only about 300 reported cases since the first detected case back in 1733 by Denys de Leyden.[1] Bennett and Ehrlich[2] found only nine cases in 50,000 surgical specimens and only one case in 15,000 autopsies reviewed at Johns Hopkins Hospital. All these tumours arise most commonly from the anterior vaginal wall resulting varied clinical presentations. They may or may not be associated with leiomyoma elsewhere in the body. We report a case of primary leiomyoma of vagina, presenting with feeling of something coming out of vagina and spotting per vaginum.

CASE REPORT:

A 30-year female P2L2 was referred to us with UV prolapse with complaints of something coming out of vagina since last 2 years and PV spotting since last 1 year. There was no aggravating and relieving factors. She had regular menstrual cycles with previous 2 normal deliveries without any complications. On gynaecological examination a bi-lobed growth of ~ 8x 3 cm was found on the anterior vaginal wall protruding about 3 cm outside the introitus giving an impression of uterine prolapse (Figure 1). There were two distinct but connected lobes felt extending from upper third to lower third of the anterior vagina wall.

Urethral meatus and cervix were pushed high up in the vaginal canal which were visualized with difficulty. The lab parameters were within normal limits. Pap smear study was negative for any intra-epithelial lesion. USG pelvis confirmed our clinical findings. MRI lower abdomen and pelvis revealed a large well-defined lobulated heterogeneously enhancing solid lesion in the anterior vaginal wall of size of 11.7x7x6.3 cm. The mass was extending upwards in the anterior aspect of pelvis behind the pubic symphysis possibly through a breech in the paravaginal tissue anteriorly and also indenting and displacing the urinary bladder superiorly without any bladder wall invasion. Antero-posterior view showed urethra (Foley's catheter in-situ) on the right side of mass. An ill-defined portion of the mass is also seen at the base of the bladder. Upper urethra has been partially encircled by the mass at the bladder neck. Three distinct lobes are seen; lower one extending inferiorly, protruding below the vaginal introitus separating the labial folds. Urethra is passing posterior to the mass in between the upper two lobes (Figure 2). A Trucut biopsy was done which revealed a benign spindle cell lesion suggestive of leiomyoma. Patient was prepared for surgical removal of the mass. Under anaesthesia vagina was examined again with Foley's catheter in situ. A mass was found in the vagina extending up to right side of anterior fornix close to bladder base overlying the urethra. A transverse incision was made over the visualized area of the mass just adjacent to the urethral opening. With finger dissection, mass was separated from vaginal wall, urethra and bladder base posteriorly (catheter indicating the course and position of urethra and bladder). Multiple, lobular, leiomyomatous masses were removed(Figure 3). There was suspicion of urethral/bladder injury. However, dye test was negative and urethral catheter not seen through urethral wall indicating no breech. However, we suspected some partial damage to a few muscular fibres of urethra. Three interrupted sutures were taken on suspicious area. Closure was done in two layers. Deep tissue closed by few interrupted sutures and vaginal mucosa was closed over it. Postoperative recovery was uneventful. Foleys catheter was removed on 5th postoperative day and patient discharged. Histopathology reported the mass to be a leiomyoma of the vagina. Patient followed upon outpatient basis and recuperated well without any complication or sequel.

Final Diagnosis: Leiomyoma of the anterior vagina.

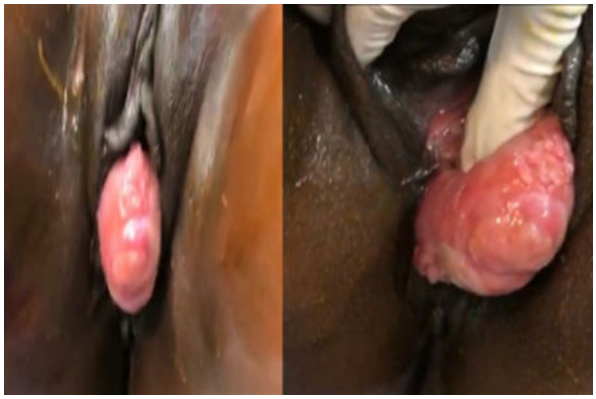

Figure 1: Mass Protruding Outside Vagina.

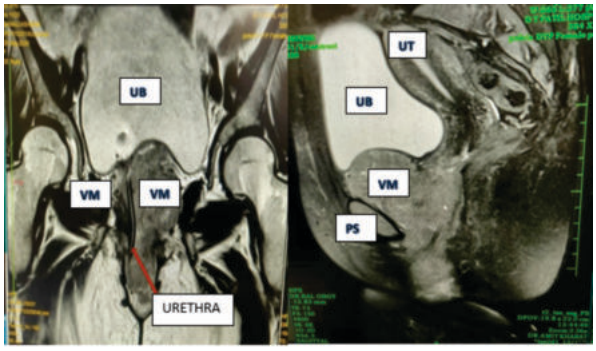

Figure 2 A Figure 2 B

UB – URINARY BLADDER, UT: UTERUS, VM: VAGINAL MASS, PS: PUBIC SYMPHYSIS.

Figure 2 A) MRI Coronal T2 WI B) MRI Saggital T2 WI

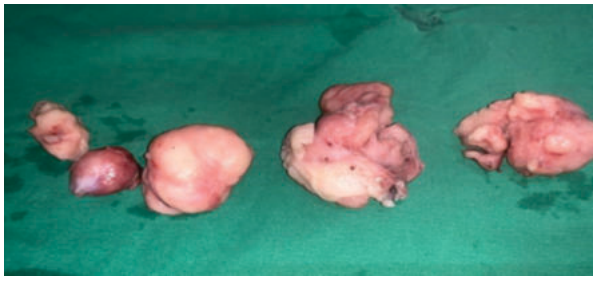

Figure 3- Excised specimen showing multiple lobes of leiomyoma.

DISCUSSION:

Tumours of vagina are rare. There are only around 300 reported cases of vaginal leiomyoma since the first described case in 1733 by Denys de Leyden. [1] Most common site of leiomyoma in female genital tract is in the uterus; followed by cervix, round ligament, utero-sacral ligament, ovary, and inguinal canal.[1] It is rarely found in vagina. Vaginal leiomyoma are commonly seen in the age group ranging from 30 to 50 years. It is reported to be more common among Caucasian women.[2] It usually occur as a single, well-circumscribed mass arising from the midline wall and less commonly, from the posterior and lateral walls (as seen in our case).[1,3,4] They may be asymptomatic but depending on the site of occurrence, they can give rise to varying symptoms including lower abdominal pain, low back pain, vaginal bleeding, dyspareunia, frequency of micturition, burning micturition, or any other features of urinary obstruction. These tumours can be intramural or pedunculated and solid as well as cystic. These tumours are usually single, benign, and slow growing but sarcomatous changes has been reported.[5] Its presentation may be mistaken for uterovaginal prolapse[8]. Preoperatively, it is difficult to diagnose on ultrasound, but magnetic resonance imaging clinches the diagnosis. In magnetic resonance imaging, they appear as well-demarcated solid masses of low signal intensity in T1- and T2-weighted images, with homogenous contrast enhancement, while leiomyosarcoma and other vaginal malignancies show characteristic high T2 signal intensity with irregular and heterogeneous areas of necrosis or hemorrhage.[6,7] However, the gold standard for diagnosis is histopathological confirmation to rule out any possible focus of malignancy. Similar case of para-urethral vaginal leiomyoma has been reported by Constantini et al.[9] Like in our case surgical removal of the tumour through vaginal approach was preferred. Urethral catheterization was done to protect the urethra during surgery. However, an abdomino-perineal approach is preferred in case of large tumours. The patient needs to be followed up for any chances of recurrence. The aim of this article was to highlight the rarity of the presentation of the condition and the intraoperative difficulty to tackle such masses in the particular area in close proximity to urethra and bladder.

Conflict of Interest: None.

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