Case Report

A Case Report of Ectopic Fibroid: Vaginal Leiomyoma

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Abstract

We hereby report a rare case of a woman who presented with symptoms of urogenital prolapse and menorrhagia. She was erroneously diagnosed to have cervical mass and underwent examination under anesthesia and was found to have only a vaginal leiomyoma. The fibroid was enucleated successfully through a vaginal incision. We discuss the rare case.

Keywords: Vaginal fibroid, ectopic fibroid, leiomyoma, urogenital mass, uterine prolapsed

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Introduction

Vaginal leiomyoma is a rare condition and is often misdiagnosed initially as a cervical mass, vaginal cyst, genital prolapse or urological problem. The incidence of the case of extremely rare (1). The diagnosis is rather challenging based on clinical examination only and the diagnosis is almost always made post-operatively following review of the histopathological examination of the mass. Examination under anesthesia may be required in some patients for a better visualization and hence improve clinical diagnosis.

Case Report

We report the case of a 41-year -old Para 5 woman who presented with mass per vagina for the past 5 years. She also experienced dyspareunia. Her last childbirth five years ago required an emergency lower segment caesarean section for obstructed labour as a result of this vaginal mass. Unfortunately, she defaulted follow-up post-partum. A papanicolaou smear done 6 years ago was normal. Her medical history was unremarkable.

She only sought medical opinion following a 6-month history of menorrhagia. She was noted to be pale with haemoglobin of 6.8 g/dL. She was normotensive and not tachycardic. Abdominal examination was unremarkable. On speculum examination, the cervix was obliterated from the view as a bulge arising from the anterior vaginal wall filled the vaginal opening. Vaginal examination revealed a large anterior vaginal mass below the urethra measuring 6 x 8cm, non-tender, smooth surface, tensed and felt apparently cystic in consistency. The upper border of the mass was difficult to be assessed properly. A healthy cervix and a normal sized uterus were felt. However, the actual cervical size and its extension could not be determined as it was obstructed by the mass.

A transabdominal scan revealed an echogenic mass of about 9 x 7 cm most probably arising from the anterior vaginal wall. It was however rather difficult to see a clear separation of the mass from the cervix. The uterus and both ovaries were normal. A computed

tomography (CT) scan of the pelvis was done to delineate origin and extension of the mass. The mass was reported as possibly originating from the cervix with clear fat plane between the bladder and rectum (Figure 1).

As the clinical and radiological diagnoses were inconclusive with possible suspicion of either a cervical or vaginal mass, she underwent Examination Under Anesthesia (EUA) and a consent was taken to proceed with surgical excision in the same setting. She had 2 pints packed cells transfusion prior to the operation for her anemia.

Following spinal anesthesia, the mass was assessed properly and found to be only involving the vagina, locating anteriorly and just below the urethra. It was separated from the cervix about 2cm. A urethral catheter was inserted which aided in the dissection. Vertical incision was made carefully about 4 cm in length on the mass at anterior wall of the vagina (Figure 2). The huge mass which measured 10 x 8 cm was enucleated in toto, vaginally. There was no bladder or urethra involvement. Following removal, the tissues in excess were trimmed, the dead space was obliterated and the anterior wall of the vagina was repaired. She had a pipelle sampling done in the same setting for menorrhagia. Post-operative recovery was uneventful. Histopathological examination confirmed the mass was a leiomyoma of the vagina (Figure 3). A pipelle sampling showed a secretory phase thus dysfunctional uterine bleeding was ascertained as the cause for the menorrhagia. She remained well six months following surgery with no urinary symptoms and resumed normal menses with oral contraceptive pills.

Discussion

Vaginal leiomyoma is a rare tumor. Pre-operative diagnosis is difficult as it is usually asymptomatic in most patients. Following the first case in 1733 by Denys de Leyden, further 9 cases were reported by Bennet and Erlich after review of 50,000 surgical specimens from vaginal mass and 15000 autopsies in John Hopkins Hospital (2).

Vaginal leiomyoma, a mesenchymal neoplasm, is usually a solitary tumor and is not associated with leiomyoma of uterus in the same patient (3). It arises from the smooth muscle lining of vagina wall and it can occupy the whole length of vagina and may present as urogenital prolapse. It follows the same nature as uterine leiomyoma. It is oestrogen-dependant, may present in some patients as menometrorhagia or progress to degeneration.

Although clinical identification is easy, it is frequently misdiagnosed as Gartner's duct cyst, vaginal inclusion cyst, urethral diverticulum, urethrocoele and/or cystocele, Skene's abscess and vaginal malignancies. Vaginal leiomyoma is commonly found at the anterior vaginal wall and least commonly in lateral vaginal wall (4). The clinical presentation varies and in many cases, they are small and asymptomatic. In large lesions, they usually present as a vaginal mass or with pressure symptoms i.e. dragging sensation, urinary symptoms, constipation, dyspareunia and protrusion of mass from vagina. In pregnancy, difficulty in labour is not uncommon.

Clinical diagnosis of vaginal leiomyoma requires vaginal and rectal examination to differentiate prolapse from cervical, uterine or vaginal masses.

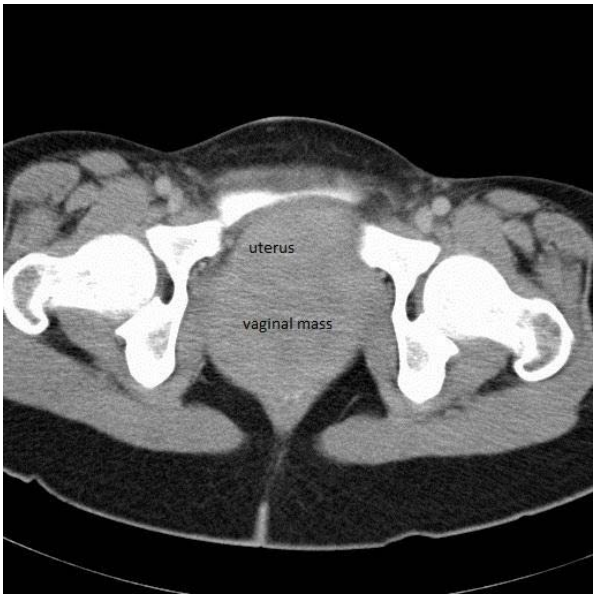

Figure 1: CT Scan features of the mass suggestive of cervical mass

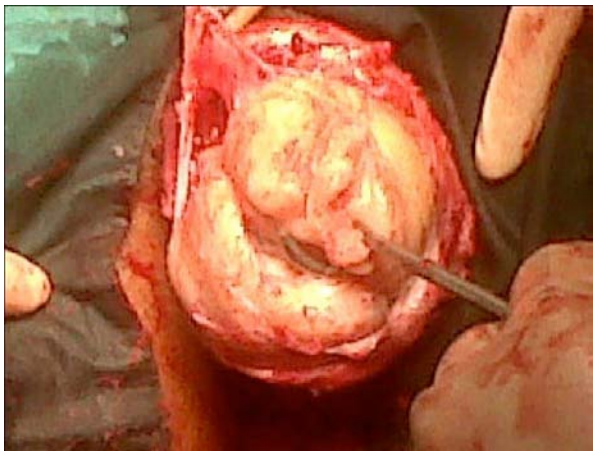

Figure 2: Enucleation of mass per vagina.

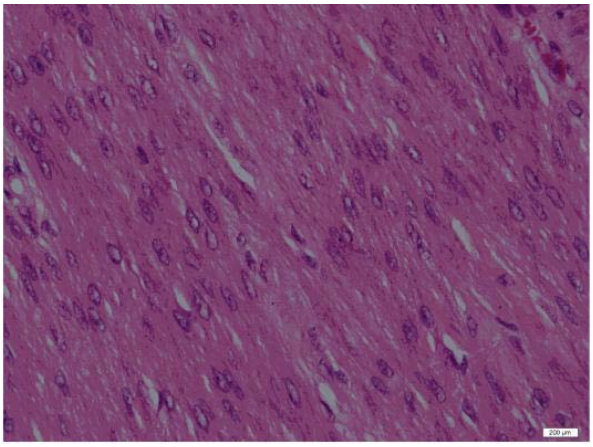

Figure 3: Histopathological examination of vaginal mass showed interlacing bundles of smooth muscle fibers suggestive of leiomyoma

However, as in this patient, the examination may be difficult due to the enlarged size of the mass and discomfort experienced by the patient. The consistency of the mass on pelvic examination may also be misleading as it felt cystic, hence leading to pre-operative misdiagnosis.

Delineation of the mass by ultrasound might be limited and any suspicion may require further radiological assessment either by Computerized Topography (CT) scan or Magnetic Resonance Imaging (MRI). MRI views are better as compared to CT scan to identify the morphology, anatomic location and may help to report the myomatous nature of the mass. However, this imaging cannot be relied upon completely. Surgical exploration and excision allows a more reliable clinical examination, offers therapeutic treatment and enables histopathological examination of the mass. The surgical route depends on the location of the mass.

Pathologically, the vaginal leiomyoma are firm mass, well circumscribed and homogenous in appearance. Whenever detected, removal of the mass is necessary to prevent further growth and eliminate sarcomatous changes although the chances of malignancy are low (5). Local recurrence is also reported, but rare.

In conclusion, the diagnosis of vaginal leiomyoma might be a challenge as misdiagnosis is not uncommon. Hence, examination under anesthesia may offer benefits in the clinical management of selected cases.

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