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Case Reports

Leiomyoma at an Unusual Site: A Case Report

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Abstract:

Uterine leiomyomas are one of the most common tumors found in women of reproductive age. Leiomyoma is usually derived from uterine smooth muscle but sometimes it may arise from an unusual site, have rarely been reported in this age group.In this present case, vaginal fibroid caused clinical

dilema. Here, we report the rare case of a leiomyoma in a 27-years married, nuliparous lady; presented with dyspareunea and rectal pain treated by myomectomy. The treatment of the symptomatic fibroid is either myomectomy or hysterectomy[1].

A liomyoma was located in rectovaginal septum and , at the junction middle and lower one third of vagina and above the anal canal, separate from the uterus. Histopathological examination confirmed as a case of leiomyoma.

Introduction:

Leiomyomas are common benign growth of muscle fibre and fibrous tissue often found in uterus[2]. It is found in approximately 25% to 35% of reproductive age women. Uterine leiomyomas are one of the most common tumors found in women of reproductive age. Although leiomyoma usually derived from uterine smooth muscle but uncommonly arise from an unusual site, have rarely been reported in this age group[3,4]. Identification of these lesions is important so that the patient can be treated appropriately. Leiomyomas at unusual site have been found in the remnants of a previous hysterectomy or myomectomy, or denovo[5,6].

Here, we report the rare case of a leiomyoma that was located in rectovaginal septum in a nuliparous woman . Removal through vaginal approach was performed.

Case history:

A 27-year-old nuliparous sexually active, woman presented with complaints of dyspareunia for last six months. She also complained of pain arround the anus and constipation for the same duration. The patient had regular menstruation from menarche (13 years) with average flow and duration. She was married for one year and used barrier method as contraceptive. She never took oral contraceptive pills. There was no history of surgery or medical illness. Her height and weight were 163 cm and 64.5 kg, respectively, with a body mass index (BMI) of 24.62 kg/m^2.

On clinical examination, she was mildly anaemic, normotensive but anxious and depressed. Per abdominal examination revealed no abnormality. Per vaginal examination showed a firm globular, mobile mass felt through lower part of posterior vaginal wall.

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Per rectal digital examination detected a firm, smooth walled mass of about 4x4 cm between the lower part of the anterior wall of the rectum and posterior wall of the vagina and rectal mucosa was free. Ultrasonologically there was a rounded mass of 4.1x 3.6 cm in between the cervix and rectum suggestive of leiomyoma.

An abdominal pelvic computed tomographic scan (CT) revealed a 4.2x3.8-cm ovoid soft tissue mass lesion located between the posterior- medial wall of the vagina and anterio-medial wall of the rectum. The mass was suspected as teratoma, leiomyoma, granuloma, schwanoma, neurofibroma or a lymph node.

After the diagnosis, based on the clinical, USG and radiological findings, counseled the patient for surgical removal of mass, through vaginal route. A longitudinal incision was given over posterior vaginal wall and a leiomyoma like ovoid mass about 4x3 cm size was detected adherent in the rectovaginal septum by loose adipose tissue. Separation was performed without any injury to the rectal wall. As the mass was confirmed to be separate from the uterus it was removed through vagina. The uterus appeared to be normal in size and shape with intact walls.

On gross examination, the exposed surface of the mass appeared to contain smooth muscle, adipose tissue. Multiple sections were submitted for histopathological examination. The microscopic examination confirmed the diagnosis of a soft tissue benign tumor composed of proliferation of smooth muscle cells arranged in interlacing with whorling bundles i.e leiomyoma. Three days after the surgery, the patient was discharged from the hospital without any complications. On follow-up, there were no further problems or recurrence noted.

Discussion:

Uterine leiomyomas the benign tumors are actually quite common, between 50% to 80% of all women have at least one. For the most part these fibroid causes no symptoms[7]. Symptoms only present in 20% to 30% of women, with clinical manifestations in women more than 35 years of age[8,9]. These tumors are composed mainly of smooth muscle cells and contain varying amounts of fibrous connective tissue[10].

Occasionally, pedunculated subserosal leiomyomas can be twisted on the uterine pedicle, and become detached in the peritoneal cavity, this tumor survives by revascularization from adjacent structures[10]. However, sometimes the tumor can adhere to the surrounding structures. The initial pedunculated fibroid likely develops premenopausally, whereas the parasitic leiomyoma may become clinically evident either before or after menopause[11]. In the present case, the leiomyoma was found in the lower part of rectovaginal septum, between the posterior vaginal wall and anterior wall of the rectum.

Leiomyomas are rarely found in postmenopausal women because their growth is thought to be estrogen dependent. Kawamura et al[11] suggested that other estrogens or growth factors, such as estrone, insulin-like growth factors (IGF), or epidermal growth factors (EGF), might play a role in the growth of leiomyomas. Lumsden et al[12] and Vollenhoven et al[13] suggested that an association of polypeptide growth factors, such as platelet derived growth factors (PDGF), transforming growth factors, and vascular endothelial growth factors (VEGF), stimulated the growth of leiomyomas. Many of these growth factors are overexpressed in leiomyomas and either increase smooth muscle proliferation (TGF – transforming growth factor, FGF – fibroblast growth factors) or DNA synthesis (EGF, PDGF), stimulate synthesis of extracellular matrix (TGF-â), and promote mitogenesis (TGF-â, EGF, IGF, prolactin), or angiogenesis (FGF, VEGF)[14].

In this case, the leiomyoma thought to be arised from rectovaginal smooth muscle. This leomyoma was excised by giving an incision in the posterior vaginal wall, by digital separation of myoma was taken out from posterior vaginal wall and rectal wall and removed it through vaginal route. There was minimal handling and blood loss. The patient was free from any postoperative complications.

Conclusion:

Although leiomyoma is a very common tumor and usually derived from uterine smooth muscle. But uncommonly may arise from an unusual site, and presents with unusual symptoms. Rapid treatment of a symptomatic lesion improved the quality of life of this patient.

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