A Rare Case of Vaginal Leiomyoma on Posterior Vaginal Wall without Uterine Myoma in Chronic Pelvic Pain Patient



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Abstract

Vaginal leiomyomas (fibromyomas and rhabdomyomas) are rarely reported in literature. They usually present as a vaginal palpable wall mass, or dysparenuria, or pressure symptoms of urinary tract and pelvic organs presentations as pelvic pain. We report one vaginal leiomyoma case found during hysterectomy for relief of chronic pelvic pain. Vaginal leiomyoma is difficult to make accurate diagnosis because of its unusual presentation. Careful examinations and imaging study may need to make differential diagnosis with malignancy.

Keywords: vaginal leiomyoma, vaginal fibromyoma, vaginal rhabdomyoma, chronic pelvic pain

Introduction

Vaginal leiomyomas (fibromyomas and rhabdomyomas) are rarely reported in literature, approximately 300 cases in the world.^[1] They represents as variable clinical presentations, the most common is vaginal palpable mass. This uncommon presentation makes variable symptoms and signs, and may difficult to make accurate diagnosis and clinical dilemmas.^[2] They can produce signs of compression of pelvic organs, urinary symptoms like dysparenuria and urinary difficulty, constipation, and 'dragging-down' sensation of pelvis. These symptoms are varies according to its size and locations.^[3] Tumors most commonly arise from anterior vaginal wall and less commonly from posterior and lateral wall.^[4-6] We report an unusual case of vaginal leiomyoma at posterior vaginal wall related with chronic pelvic pain.



Figure 1: preoperative CT image shows small cystic mass at posterior cervix-vaginal area

Case

A 40 year of women was visited our outpatient department of obstetrics and gynecology with dysmenorrhea, menorrhagia, and chronic pelvic pain. On physical examination and transvaginal ultrasonography, global shaped uterus was very slightly enlarged with thick posterior uterine wall and thin endometrium, suspected with uterine adenomyosis. She already had treatment history with Mirena® and Yasmin® at other gynecologic clinics, but had no effects at all. Especially she suffered with pelvic pain even was not in period. She had a chronic pain as 'Dragging down' sensation of lower abdomen, waist, and pelvis. She got Qlaira® for 1 year and 6 months. Among her symptoms, mensturation-related symptom was decreased after longterm medication but chronic pelvic pain was kept on. So she wanted surgical treatment and we decided hysterectomy. Pelvic Computer Tomography was done, a small low attenuated mass seems like nabothian cyst at cervix one year before operation, and after one year its attenuation was changed. No other specific lesions or suspected invasive mass (Fig 1). Operation was done with laparoscopy. With laparoscopic view, slightly enlarged uterus and 1.5cm sized small mass at posterior cul-de-sac was seen. After removal of uterus, the mass was resected from posterior vaginal wall apart. The mass was encapsulated smooth surface, firm, pinkish-gray colored. All tissues were sent to pathologic department, labeled as 'uterus' and 'vaginal wall mass' and the result of biopsy were adenomyosis of uterus and vaginal wall leiomyoma. After operation, her symptoms are disappeared. Follow-up was planned for evaluation about recurrence.

Discussion

Leiomyoma is the most common tumor of female genital tract. But leiomyoma of vagina is very rare, reported cases are only about 300 through the world.^[1] Vaginal myoma occurs most frequently between 38-48 years,^[7] clinical presentations include varying symptoms as urinary symptoms (retension, obstruction, dysuria, dysparenuria), constipation, low abdominal pain, pelvic pain, dysmenorrhea etc. to rarely asymptomatic.^[1,2,6] Their sizes and locations are quite varies; sizes from 0.5 to 15cm, and usually arise from anterior vaginal wall, rarely on posterior wall but, may be found in any location of vagina.^[5,8] These variable characters are according to the tumor locations, most of vaginal myomas arises from anterior vaginal wall and makes urinary-related symptoms due to mass effect.^[7,9,10] Patients may primarily without any symptoms due to the elasticity of vagina.^[3] But as tumor grows slowly, symptoms may onset according to their location, weight, and size; can cause urinary symptoms, dysparenuria, constipation, leucorrhea, protrusion of vaginal mass, 'dragging down' sensation, and even chronic pelvic pain.

Vaginal myomas may be confused with other vaginal neoplasms including benign to malignant because of their infrequency.^{[1,2,7,11}] These tumors are usually localized benign mass without metastasis and infiltration. They are usually firm solid mass, but can undergo degenerative changes, they also can be soft cystic and even necrotized.^[8,11] So they often can be misdiagnosed as cystoceles, uretherocele, skene duct abcess, nabothian cysts, uretheral diverticulum, inclusion cysts of vagina, and vaginal malignancies.^[12] Therefore vaginal myomas should be considered in the differential diagnosis, and thorough examinations and preoperative studies including image study as pelvic computer-tomography(CT) or Magnetic-Resonance Images(MRIs) are needed. MRI is better than CT, because it provides more information about the morphological, structural characteristics of the mass and anatomical relationships between the lesions.^[13] Vaginal myomas generally shows typically well-circumscribed round mass, relatively low signal as similar as surrounding muscles.^[13-15] If margin of mass is irregular, and shows high signals in MRI, should raise the concern of malignancies.^[11] In our case, we only got CT images, so the information was restricted. We found the mass at posterior cul-de-sac, arised from posterior vaginal wall. And after removal of mass, the patients symptom especially 'dragging down' pain of pelvic area is significantly improved. Previous reports about vaginal myoma are quite rare, and moreover most of the cases were from anterior wall of vagina and related to urinary symptoms. There are no reports about vaginal myoma especially originated from posterior wall without uterine myoma and related to chronic pelvic pain up to date. Our case was unusual one compared to previous reports about vaginal myomas. Further studies and more reports

needed to be compared and clarify this relationship of vaginal myoma and chronic pelvic pain, recurrence and long-term outcomes.

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