Leiomyoma of the vagina

A 48 year old female, gravida 1, para 1, with a normal past medical history, presented to routine gynecological physical examination. The examination showed an asymptomatic nodule, approximately 2-3 cm in size, on the lateral wall of the upper third of the vagina, apparently separated from uterus and right ovary. She had no complains related to the urogenital tract, in particular no dyspareunia, prolapse feeling or micturition. The patient was reffered to have an US study which showed a homogeneous hypoechoic mass on the right lateral wall of the vagina, consistent with a diagnosis of fibrous tissue. To better characterize the lesion and to determine the relationships between the nodule and the surrounding structures, MR imaging was performed. The MR diagnosis was of a nodule in the upper third of the vagina, separated from the cervix. The nodule was hypovascular as compared to the uterine cervix, consistent with fibrous tissue. US guided biopsy was performed.

Discussion:

Tumours of the vagina are very rare. When found, in most cases, they are leiomyomas; the first report of a vagina leiomyoma was by De Leyden in 1733 and since that time approximately 300 cases have been reported. Leiomyomas of the vagina are more common in white women than in black women and may occur from puberty to 70 years of age. The clinical presentation varies considerably. Most tumors are generally small, usually arise along the anterior vaginal wall, and give no symptoms. Larger tumors have been associated with dyspareunia, bladder obstruction and urinary retention. The method to achieve early diagnosis is by performing a meticulous screening examination, paying special attention to palpating the vagina. An uncommon presentation may necessitate imaging studies. On MR imaging, vaginal leiomyomas have the same appearance of uterine leiomyomas, and present medium-intensity homogeneous signal, with little enhancement after gadolinium injection. Larger tumors may become eterogeneous. Differential diagnosis of a vaginal wall mass includes cystocele, urethrocele, urethral diverticulum, cervical myoma, vaginal cysts, and prolapse of uterus. In our case many of them could be excluded because of the postero-lateral location. Whenever such a tumor is detected, it is advisable to remove it in order to prevent it from further growing and undergoing malignant change.
**Differential Diagnosis List:** Leiomyoma of the vagina.

**Final Diagnosis:** Leiomyoma of the vagina.

**References:**

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Description: The uterus is imaged along its coronal plane. Lateral to the cervix there is soft tissue mass apparently located within the fornix (arrows). There is some fluid in the rectovaginal space (arrowheads). Origin:
Description: This plane shows that the mass (arrows) is clearly separated from the cervix and from the levator ani muscle. Origin:
Figure 3

**Description:** The mass appears very homogeneous (arrows). There is some fluid in the rectovaginal space (arrowheads). **Origin:**
Figure 4

Description: The mass (arrows) is relatively hypovascular compared to the cervix and remains homogeneous even after contrast injection. Origin:
**Description:** The mass (arrows) is relatively hypovascular compared to the cervix and remains homogeneous even after contrast injection. **Origin:**