Removal of a vaginal leiomyoma presenting as tumor previa allowing vaginal birth

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Summary

Leiomyomas of the vagina are very rare tumors of the female genital tract with only 300 cases reported so far. A case of removal of the vaginal leiomyoma presenting as tumor previa in advanced pregnancy is described. Removal of the tumor allowed vaginal birth three weeks after surgery.

Key words: Leiomyoma; Vagina; Birth.

Introduction

Benign or malignant neoplasms of the vagina are rare. Most vaginal tumors are asymptomatic until a significant size is reached. Symptoms and signs may include a sensation of pressure, dyspareunia, obstruction of the vagina or urethra, or vaginal bleeding. Most of these lesions can be detected during routine examination of an asymptomatic patient. Vaginal leiomyomas or fibromyomas are rare lesions usually located in the anterior vaginal wall. Only between 250 and 300 cases have been reported in the world literature [1, 2]. These lesions are benign smooth muscle neoplasms, usually solitary and in many cases asymptomatic. Histologically, they resemble leiomyoma of other origins. Sites of origin include vaginal smooth muscle, local arterial musculature, or smooth muscle of the bladder or urethra. As uterine leiomyomas, vaginal lesions are also estrogen dependent. Malignant conversion is extremely rare. When large, symptoms can include vaginal discharge or bleeding, dyspareunia, or urinary retention. The differential diagnosis of a midline anterior vaginal mass includes urethral diverticulum, fibroepithelial polyp, cystocele, Skene duct abscess, or vaginal malignancy. Therapy involves excision in symptomatic patients. Recurrence is uncommon but reported [3, 4]. Vaginal neoplasms are divided into cystic or solid lesions and biopsy provides a definitive diagnosis.

Case Report

Our patient, aged 45 years, tertiparous, presented in the 32nd week of gestation with a tumor on the right vaginal wall which was first noticed three months before. During that time the patient was asymptomatic.

On examination a tender, solid, elastic tumor 60 x 70 mm in diameter was found protruding through the vaginal vestibule. The pedunculated tumor originated from the right vaginal wall, emerging through the defect in the vaginal wall mucosa. The tumor obstructed the vaginal outlet as tumor previa. The distal part of the tumor was necrotic. Obstetric findings were normal, consistent with eight months of pregnancy. Tumors of this localization can cause obstruction of the birth canal preventing normal vaginal birth. After preparation of the operative field for vaginal surgery, enucleation of the tumor was performed, and hemostasis was achieved with sutures placed at the pedicle of the tumor. The defect on the vaginal wall was drained and sutured. The postoperative course was normal and the patient was treated with antibiotics, tocolytic therapy and dexamethasone to achieve fetal lung maturity in case of premature labor. She was discharged from the hospital the sixth postoperative day. She gave birth three weeks later (breech presentation) to a healthy infant weighing 2,650 g. Histopathological findings were: an oval node weighing 130 g, size 75 x 75 x 70 mm, yellow color, tenacious to soft consistency, spindle fiber structure, with marked swelling. Histopathological diagnosis was: leiomyoma with edema.

Discussion

Leiomyomas are benign, mesenchymal, monoclonal tumors that typically originate from the myometrium smooth muscle cells, although atypical sites such as the vagina, lungs, vascular structures, and retroperitoneal area have been reported [5]. Smooth muscle tumors are the most common tumors of the adult vagina, but also bizarre (atypical, symplastic, or pleomorphic) leiomyomas can be found in this localization [6].

Vaginal fibromyomas (leiomyomas and rhabdomyomas) are rare; approximately 300 cases have been reported in the literature. Surgical excision through the vaginal route has been the traditional approach, but the abdominoperineal route may be necessary for huge tumors [2]. Recurrences occur infrequently.

Leiomyomas of the vagina may have variable clinical presentation. They are asymptomatic or present with pain, dyspareunia or urinary tract pressure symptoms. Usually they are slow-growing, but rapidly growing vaginal leiomyomas may mimick a prolapsed uterus [7]. If presenting as a mass they are most often diagnosed clinically and treated surgically by excision. These hypervascular tumors may sometimes cause life-threatening hemorrhage. Preoperative embolization may be helpful in devascularization of the tumors before surgical excision, minimizing perioperative blood loss [8]. Sørensen and Chauhan [9] presented a case of vaginal wall leiomyoma of a posterior vaginal wall which was mistaken for a cer-

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Fig. 1

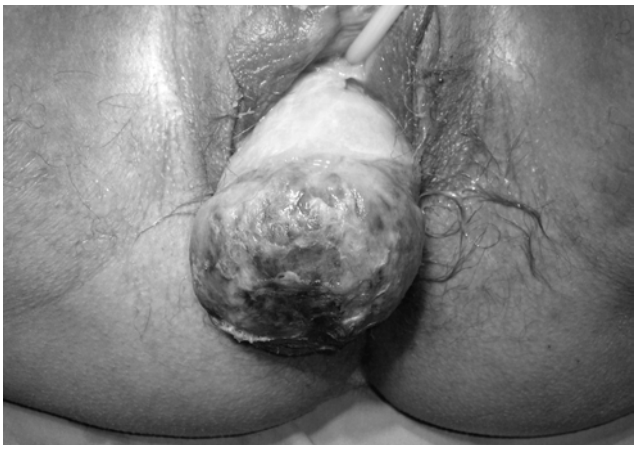

Fig. 2

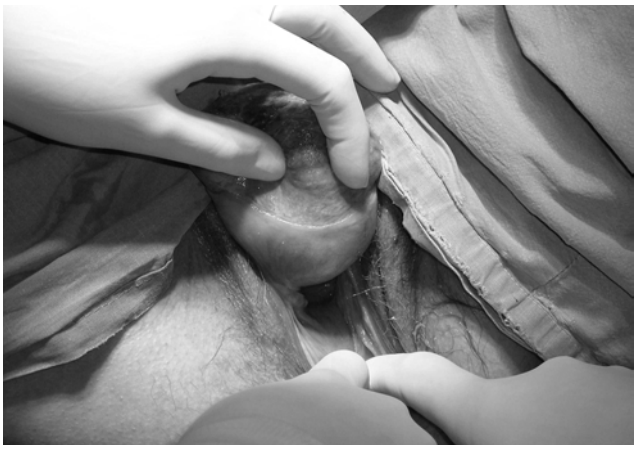

Fig. 3

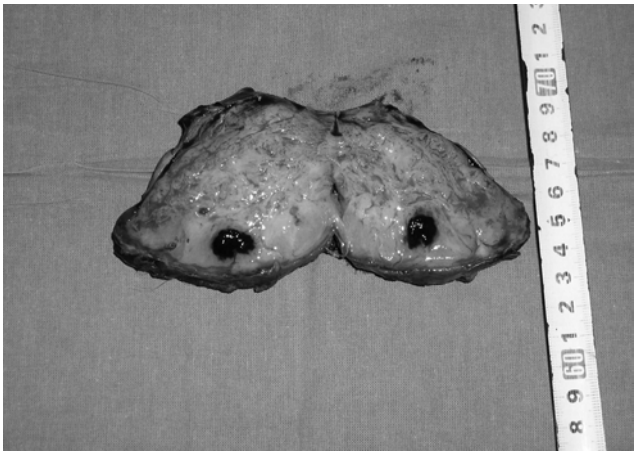

Figure 1. — Tumor of the right vaginal wall obstructing the vaginal outlet.

Figure 2. — Relation of the tumor to the vaginal outlet.

Figure 3. — Cross section of the tumor after removal.

vical fibroma. It is suggested that whenever there is a clinical suspicion of a vaginal leiomyoma, magnetic resonance imaging (MRI) or translabial ultrasound (US) are the recommended imaging modalities to achieve a proper diagnosis. Preoperative imaging and biopsy are helpful to rule out possible malignancy. Uncommon presentation may necessitate imaging studies. The lesion usually has MRI and US features similar to its uterine counterpart [10]. Leiomyoma may also originate from the vaginal cuff after total abdominal hysterectomy and bilateral salphingo-oophorectomy [9]. Sometimes the size of the tumor necessitates an abdominoperineal approach and hysterectomy for better surgical access. Govri *et al*. [11] reported a case of a vaginal leiomyoma arising from the right lateral wall that presented as a gluteal swelling with pus discharging per the vagina, creating a clinical dilemma in diagnosis.

Our patient presented with a large vaginal leiomyoma in advanced pregnancy. Such tumor may cause obstruction of the birth canal as tumor previa. We performed excision of the tumor in order to liberate the birth canal which allowed normal vaginal birth three weeks after surgery.

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