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Case Report

Acute presentation of undiagnosed vaginal leiomyoma in pregnancy

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ABSTRACT

Vaginal leiomyomas are rare benign solid tumors of the vagina· There are approximately 300 case reports available in the literature and the para-urethral site is extremely uncommon. Here we report a case of 29 a year old primi-gravida who presented with complaints of sudden protrusion of mass arising from anterior vaginal wall at 16 weeks of pregnancy. On per-vaginum examination firm, mildly tender mass 6×4×5 cm was palpated arising from the lower one third of anterior vaginal wall and ending approximately 1 cm proximal to the external urethral meatus, occupying whole of the introitus and it was separate from the cervix. Trans-vaginal surgical enucleation of the vaginal leiomyoma was done. Post-operative histopathology confirmed as leiomyoma.

Keywords: Leiomyoma, Pregnancy complications, Vaginal leiomyomas

INTRODUCTION

Vaginal leiomyoma remains uncommon entity with only 300 reported cases since the first detected case in 1733 by Denys de Leyden.[1,2] They are usually located on anterior vaginal wall and rarely on lateral vaginal wall and vulvar region.[3] Very few cases have been reported during pregnancy as well. Occurs most frequently between the ages of 35 to 50 years.[4,5] Depending upon the size and location vaginal leiomyoma may present with diverse clinical symptoms such as swelling, dyspareunia, dysuria and pain.[6] Leiomyoma are benign mesenchymal tumors presenting the most common uterine neoplasm, vaginal leiomyoma are like uterine myomas. Histopathology confirms the diagnosis. We present a case of sudden protrusion of vaginal leiomyoma from anterior vaginal wall in 29-year-old primigravida at 16 weeks POG.

CASE REPORT

A 29-year-old, primigravida at 16 weeks of POG came to emergency with complaints of pain in lower abdomen, discharge per vaginum and sudden protrusion of mass pervaginum. She was a booked antenatal case with regular previous cycles and no history of major medical or surgical illness in past. On local examination a 6×4×5 cm firm lump seen, protruding through the introitus. On per-vaginum examination firm, mildly tender mass 6×4×5 cm felt arising from the lower one third of anterior vaginal wall ending approx. 1cm proximal to the external urethral meatus, occupying whole of the introitus and felt separate from the cervix. Perineal ultrasound done in emergency revealed a solid mass in the anterior vaginal wall, sub-urethral with closed proximity to the external urethral meatus, but separate from the urethra.

TAS showed single live fetus of 16 weeks gestation. Provisional diagnosis of anterior vaginal wall fibroma with 16 weeks pregnancy was made.

Patient was taken up for examination under general anaesthesia (EAU) and removal of anterior vaginal wall mass. Examination findings were confirmed. Patient was catheterized, a curvilinear incision placed on right lateral aspect of the mass over the vaginal mucosa, incision was extended inferiorly and on the left lateral side while simultaneously enucleating the mass from the surrounding tissue and the vaginal mucosa. Redundant vaginal mucosa excised staying away from the urethra. Dead space obliterated and vaginal mucosa closed. Specimen sent for

histopathology confirmed vaginal wall leiomyoma. Pregnancy continued uneventfully, and she had spontaneous vaginal delivery at term; male baby of 3.67 kg. The vaginal scar was unruptured.

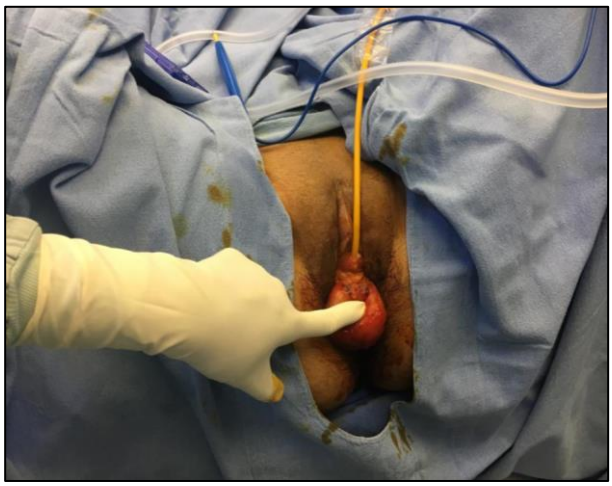

Figure 1: Preoperative image of mass per vaginum.

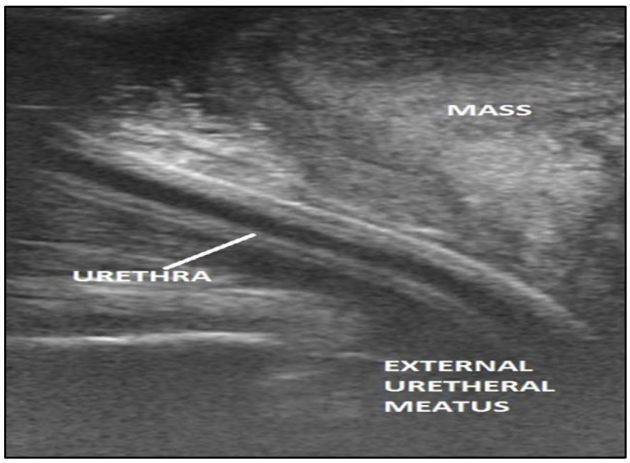

Figure 2: Perineal ultrasound image.

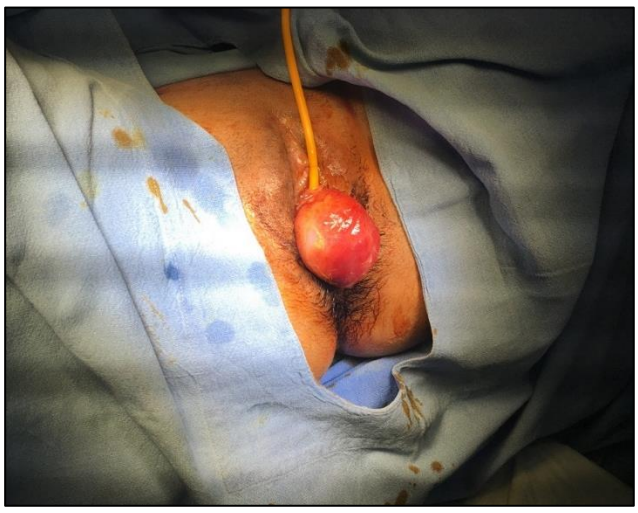

Figure 3: Intraoperative image of mass.

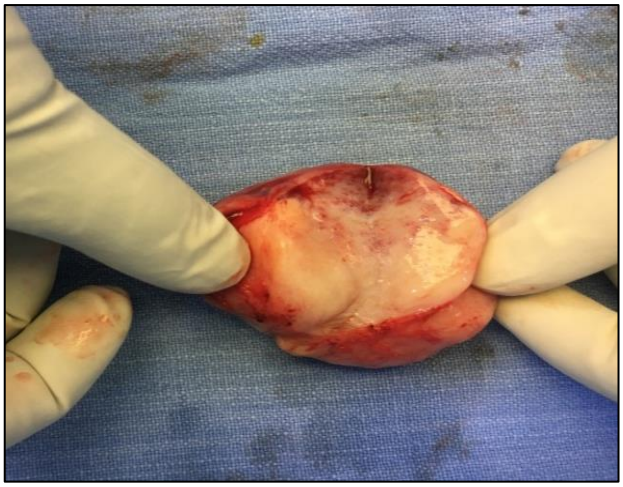

Figure 4: Cut section of the specimen.

DISCUSSION

Vaginal leiomyoma remains uncommon entity with only 300 reported cases since the first detected case in 1733 by Denys de Leyden.[1-3] They are usually located on anterior vaginal wall and rarely on lateral vaginal wall and vulvar region.[1,3] Occurs most frequently between the ages of 35 to 50 years.[4,5] Depending upon the size and location vaginal leiomyoma may present with diverse clinical symptoms such as swelling, dyspareunia, dysuria and pain.[6]

Several entities must be considered in the differential diagnosis of a mass located between vagina and urethra.[7] They include benign lesions such as leiomyomas, polyps, Gartner's duct cyst and endometriosis as well as malignant vaginal tumors (leiomyosarcomas) and rarely mata-stasis.

Leiomyoma are benign mesenchymal tumors presenting the most common uterine neoplasm, vaginal leiomyoma is like uterine myomas. Sarcomatous change may occur in benign leiomyoma.[8] weather leiomyosarcomas are primary or due to malignant change in benign tumors is unclear.in a retrospective analysis of leiomyosarcoma, Cobanoglu et al concluded that malignant transformation was more common in extra-uterine leiomyomas.[2]

Whilst only a few cases have been reported in pregnancy, it is obvious that vaginal lesion can lead to difficulty in labour and delivery (Table 1).[9-14]

In pregnancy, excision of these tumors seems to be the treatment of choice.[15] Careful assessment of the origin and extent of fibroid is important and should be performed before the operation. The optimal time for removal is second trimester. The probability of early abortion or wound breakdown during labour is thereby reduced. A routine gynecological examination before pregnancy or during the first antenatal visit is very important and should be encouraged not only to diagnose but also to manage such problems.

Table 1: Reported cases.

Authors	Age (Years)	Gestational weeks	Outcome	Delivery
Bennett and Erlich[9]	Unknown	Unknown	No operation (small size)	At-term vaginal delivery
Sadan et al[10]	30	18	3 weeks after birth, vaginal removal	At 36 weeks, cesarean section
Schonberg et al[11]	26	26	Vaginal removal	At-term vaginal delivery
Lucos et al[12]	Unknown	Midtrimester	Vaginal removal	At term vaginal delivery
Rywlin et al[13]	32	Midtrimester	Vaginal removal	At term cesarean section
Ahmet Karata et al [14]	29	39	Vaginal removal 3 months after cesarean section	At term cesarean section

CONCLUSION

In pregnancy, excision of these tumours seems to be the treatment of choice. Careful assessment of the origin and extent of the fibroid is important and should be performed before the operation. The optimal time for removal is between the 16th and 32nd week. The probability of early abortion or wound breakdown during labour is thereby reduced. A routine gynaecological examination before pregnancy or during the first antenatal visit is very important, and should be encouraged not only to diagnose but also to manage such problems, as well as to diagnose many other diseases during pregnancy. In our case trans-vaginal surgical enucleation of the vaginal leiomyoma was done. Specimen sent for histopathology confirmed vaginal wall leiomyoma. Pregnancy continued uneventfully, and she had spontaneous vaginal delivery at term; had a male baby of 3.67 kg.

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