Case report

A rare case of vaginal fibroid presenting as urethrocele

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Abstract:

Leiomyomas are common benign tumors of uterus, incidence being 20-40% in women of reproductive age and frequency of presentation increases with age[1]. Vaginal leiomyoma occur rarely and that also in late reproductive age group and peri–menopausal women. We report a case of 43 years old multigravida who presented with something coming out of vagina more during urination and on straining for defecation.Vaginal myomamay vary from 0.5 cm to 15 cm in diameter. They may occuranywhere within vagina ,usually arising in smooth muscle layer of midline anterior vaginal wall. Vaginal myoma can be asymptomatic or symptomatic with symptoms like dysuria, dyspareunia , bulging mass per vaginum. They may be confused with variety of benign vaginal tumours and even urethrocele.A pre-operative diagnosis should be made properly to decide the surgical plane and surgical route.

Key words: Leiomyoma, Vagina

Introduction:

Leiomyoma are benign mesenchymal tumors presenting the most common uterine neoplasm. Vaginal leiomyoma are like uterine myoma [2]. Thesetumors arise most commonly from anterior vaginal and may be associated with leiomyoma elsewhere in the body too. They rarely exist as a primary tumor and are benign, solitary and usually of small size so as not to cause any symptom.Depending on the size and location vaginal leiomyoma may present with variety of different clinical symptoms such as swelling, dyspareunia, dysuria , vaginal discharge or bleeding , urinary retention and difficulty in defaecation [3].Diagnosis is usually difficult preoperatively as the condition mimics cystocole or cervical fibroid, but at times is done with the help of better imaging techniques such as MRI.Diagnosis of a mass can be confirmed either by frozen section or post- operative histopathology. We present a case of primary leiomyoma of vagina arising from anterior vaginal wall and presenting with complaints of something coming out of vagina and increased frequency of micturition which was initially confused with urethrocelebecause of its clinical presentation of symptoms [4].

Clinical summary:

A 43 year old female P3L2 (previous 3 LSCS) was referred to our OPD from CHC with chief complaints of something coming out per vaginum and pain lower abdomen since 3 months. She had frequency of micturition since one month.There was no history of dysuria or urinary retention. There was no history of dyspareunia. Her menstrual and obstetric history was insignificant. Patient was on anti-hypertensive medication since two years with very poor compliance. On Per Speculum examination there was a firm mass arising from anterior vaginal wall which was adherent to lateral vaginal wall and cervix

was pulled up. Per Vaginal examination revealed that uterus was normal size ,anteverted , fornices were free, a firm mass 4 x 5 cm was felt in anterior vaginal wall away from cervix. The mass was irreducible and no thrill present and coughing reflex test was negative[5]. Her routine investigations including urine microscopy culture and paps smear were within normal limits. Ultrasonography revealed a 5.5 x 6 cm hypo echoic mass arising from anterior wall of vagina.Patient was examined under local anaesthesia. A bladder sound was inserted inside the urethra to know the extent of the mass.Cystoscopy study was normal except the finding of bladder neck elevation[6]. MRI showed a solid mass of low signal intensity in T1- and T2-weighted images, with homogenous contrast enhancement. Provisional diagnosis of anterior vaginal wall mass was made [7]. Transvaginal route was considered for its removal after proper written and informed consent. Vertical incision was given over the mass and it was separated from capsule and bladder by sharp dissection and removed enmass through vaginal route. Redundant vaginal wall excised and purse string sutures were given to obliterate dead space.Vaginal wall was closed by continuous interlocking sutures. Postoperatively on cut section it looked like leiomyoma and was sent for histopathology which was consistent with clinical diagnosis of leiomyoma of anterior vaginal wall. Patient's post - operative period was uneventful.

Discussion:

Vaginal leiomyoma is a rare entity with only around 330 reported cases since the first described case in 1733 by Denys de Leyden. Leiomyomas in female genital tract are common in the uterus and to some extent in the cervix followed by the round ligament, utero-sacral ligament, ovary, and inguinal canal [8]. Vaginal leiomyomas if rarely seenare found in the age group ranging from 40 to 50 years and are reported to be more common among Caucasian women. They usually occur as single,benign , very slow growing , intramural or pedunculated , solid or cystic , well-circumscribed mass arising from the midline anterior wall and less commonly, from the posterior and lateral walls [9]. They are generally asymptomatic but can vary depending on the site of occurrence. They can give rise to varying symptoms including lower abdominal pain, low back pain, vaginal bleeding, dyspareunia, frequency of micturation, dysuria, or other features of urinary obstruction. In magnetic resonance imaging, they appear as well-demarcated solid masses of low signal intensity in T1- and T2-weighted images, with homogenous contrast enhancement. Histopathological confirmation is the gold standard of diagnosis and helpful to rule out any focus of malignancy [10] . Surgical removal of the tumor through vaginal route, preferably with urethral catheterization to protect the urethra during surgery, is usually the treatment of choice as the approach is easy and there is availability of good surgical plane. Huge tumors may require a combined abdominal and perinealapproach[11]. Usually there is an apparent cleavage plane, so surgical removal is safe with minimal bleeding .Preoperative embolization may be helpful indevascularization of such tumours before surgical excision as these tumors can sometime present with life- threatening haemorrhage due to their hypervascular nature at times[12]. Vaginal leiomyomas rarely transform into sarcoma or re occur. Complete surgical excision as soon as possible is recommended. The patient needs to be followed up for chance of recurrence.

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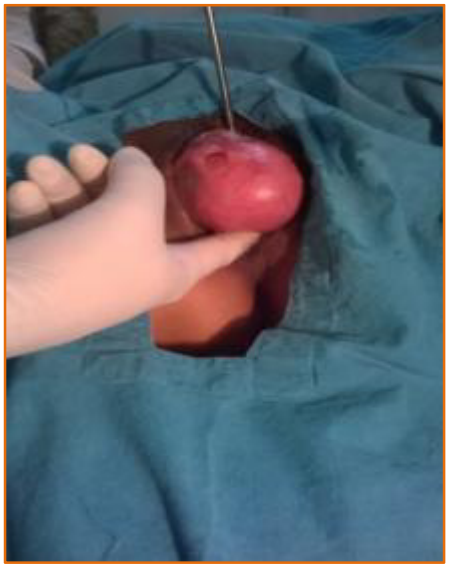

Figure 1 : Examination under local anaesthesia with bladder sound.

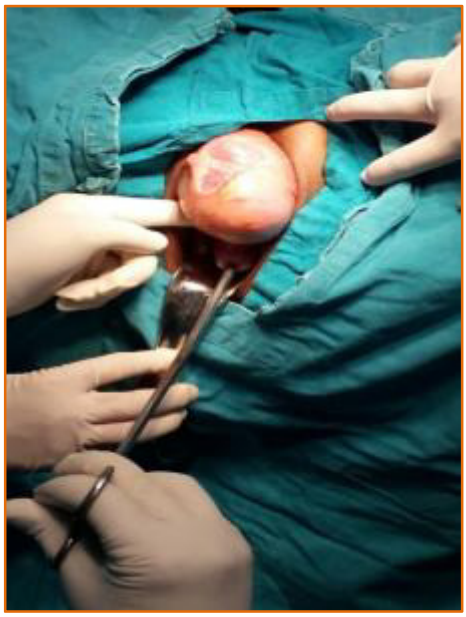

Figure 2: EXAMINATION OF THE VAGINAL MASS.

Figure 3:POST-OPERATIVE VIEW.

References:

1.Manjula NV, Jyothi GS. Leiomyoma: a common benign tumor at an unusual location. Proceedings in Obstetrics and Gynecology, 2015;5(1):Article 5 [4 p.].

2.Imai A, Furui T, Hatano Y, Suzuki M, Suzuki N, Goshima S; Leiomyoma and rhabdomyoma of the vagina . Vaginal myoma. J ObstetGynaecol: 2008 Aug;28(6):563-6.

3. Nagai N, Katayama Y, Iguchi M, Esa A. A case of urinary retention due to a female paraurethral leiomyoma: HinyokikaKiyo : 1988 Apr;34(4):696-700.

4. Wu Y, Wang W ,A Misdiagnosed Vaginal Leiomyoma: Case Report : Urol Case Rep. 2015 Mar 18;3(3):82-3.

5 . Bell SW, Kempson RL, Hendrickson MR. Problematic uterine smooth muscle neoplasms: a clinicopathological study of 213 cases. Am J SurgPathol 1994;18:535–558.

6 .Goto K, Orisaka S, Kurokawa T, Miyazaki M, KotsujiF :Leiomyoma of the female urethra: urodynamic changes after surgical intervention : IntUrogynecol J Pelvic Floor Dysfunct.2005 Mar-Apr;16(2):162-4.

7. Stankova T, Ganovska A, KovachevS ; VAGINAL LEIOMYOMA AFTER TOTAL ABDOMINAL HYSTERECTOMY--CLINICAL CASE AND REVIEW OF LITERATURE ; AkushGinekol (Sofiia). 2015;54(6):39-42.

8. Costantini E, Cochetti G, PorenaM : Vaginal para-urethral myxoid leiomyoma: case report and review of the literature; IntUrogynecol J Pelvic Floor Dysfunct ; 2008 Aug;19(8):1183-5.

9.Leron E, Stanton SL. Vaginal leiomyoma--an imitator of prolapse :IntUrogynecol J Pelvic Floor Dysfunct ; 2000 Jun;11(3):196-8.

10. Tavassoli FA, Norris HJ. Smooth muscle tumors of the vagina.ObstetGynecol 1979;53:689–693.

11. Fletcher CDM, Kilpatrick SE, Mentzel T. The difficulty in predicting behavior of smooth-muscle tumors in deep soft tissue. Am J SurgPathol 1995;19:116–117.

12.Bapuraj JR, Ojili V, Singh SK, Prasad GR, Khandelwal N, Suri S. Preoperative embolization of a large vaginal leiomyoma: report of a case and review of the literature; AustralasRadiol. 2006 Apr;50(2):179-82.