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A CASE REPORT ON A RARE CASE OF VULVAL LEIOMYOMA

Obstetrics & Gynaecology

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ABSTRACT

A Leiomyoma is a benign tumour of the smooth muscle cells which can develop in any area of the body which has smooth muscle component.
This is a case report of a 35 year old multiparous woman who came to our OPD with complaints of mass over the perineal region with a dragging sensation, which was initially small in size and gradually grew to the present size over a period of one year, now causing her discomfort during walking and sitting.
Clinic examination revealed a localised mass located over the lower portion of the left labia majora measuring 3*4 cms which was non tender, partially mobile and caused discomfort during deep palpation.
The lesion was surgically excised and histopathology revealed a benign Leiomyoma of the vulva.

KEYWORDS

Leiomyoma, Vulva, labia majora, histopathology

INTRODUCTION:

Leiomyomas are well circumscribed benign soft tissue tumours of mesenchymal origin. Around 3.8 % of all benign soft tissue tumours are leiomyomas [1].

Leiomyomas are monoclonal tumours and the most common site for their occurrence is the muscle cells of the myometrium[2], however they can develop at any site where smooth muscle cells are present such as the vulva, vagina, ovaries, urinary bladder, urethra, round ligaments, uterosacral ligaments, inguinal canal and the retroperitoneum.[3,4]

Genital Leiomyoma's are rare tumours [5] Less than 160 cases of vulvar Leiomyoma have been reported in the literature and this condition when encountered is often misdiagnosed as Bartholin's cyst. [6,7,8]

Factors that supports the diagnosis of Leiomyoma's are the inverted labia minora on examination and the rubbery firm consistency of the lesion unlike the Bartholin's cyst . Surgical excision is the treatment of choice and Histopathological examination and confirmation of diagnosis to differentiate between the benign and malignant nature is mandatory and long-term follow up is usually advisable for early detection of recurrences.

Vulval Leiomyoma's account for 0.03 % of all gynaecological neoplasia [9] And 0.07 % of all vulvar tumours [10]

We hereby present an interesting case of vulvar swelling which was surgically excised and histopathology showed the lesion to be a Leiomyoma.

CASE REPORT:

A 35 year old multiparous lady presented to our OPD with swelling in the left perineal region since one year, which was small in size when the patient initially noticed and has gradually increased to the present size.

The swelling was painless, but caused a dragging sensation in the perineum and caused discomfort during sitting and walking. There was no history of vaginal discharge. Patient gave no history of fever. She had regular menstrual cycles and had no bladder or bowel disturbances.

On examination, the patient was afebrile. Vitals were stable local examination revealed a well demarcated mass over the left labia majora which was non tender. Well defined edges were noted. The lesion was firm in consistency, partially mobile and non-reducible. There was no inguinal lymphadenopathy. Bilateral labia Minora , clitoris and right labia majora were normal.

Per speculum and per vaginal examination of the patient were within normal limits.

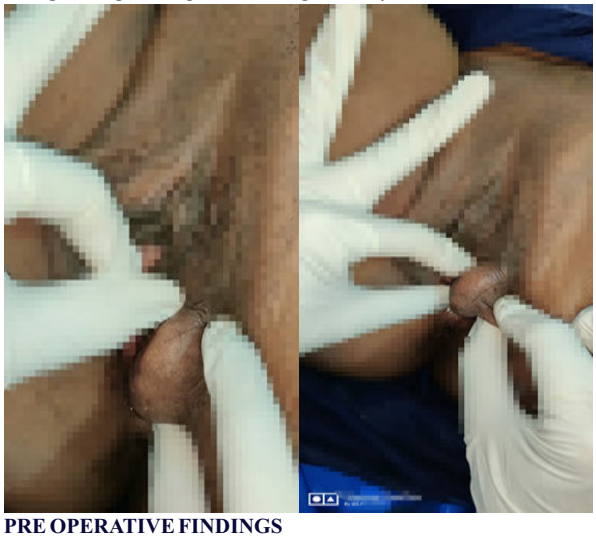
Routing investigations of the patient were normal.

Ultrasonography of the abdomen showed normal anteverted uterus and ovaries, with normal endometrial lining.

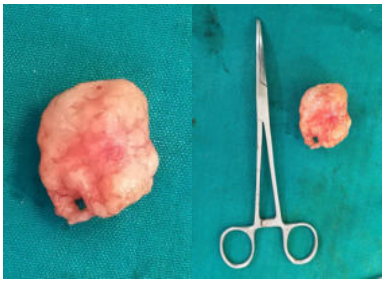
The patient was planned for surgical excision of the mass through a vaginal approach.

The procedure was performed under spinal anaesthesia and the incision was made over the lesion at the muco-cutaneous junction. The mass was enucleated and sent for Histopathology. Cut section of the tumour showed whorled appearance and an intraoperative diagnosis of Leiomyoma was made Post-operative stay of the patient was uneventful.

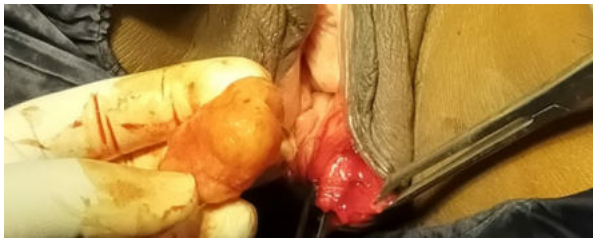
Histopathology showed the mass to consist of smooth muscle cells arranged in whorled patterns with no evidence of malignancy and a Histopathological diagnosis of benign Leiomyoma was made.



PRE OPERATIVE FINDINGS



VULVAL LEIOMYOMA OF SIZE 4.0 * 3.5 cms



Intra Operative Findings

Post Operative Status

DISCUSSION:

Leiomyoma's are benign soft tissue tumours that arise from the smooth muscle components and account for 3.8% of all benign soft tissue tumours. [11] External genital Leiomyomas are extremely rare and usually mimic a Bartholin's cyst.

Vulval Leiomyomas account for 0.03 % of all Gynaecological neoplasms [9] and 0.07 % of wall vulvar tumours.[10] Vulvar Leiomyomas are rare and only 160 such cases have been reported in the literature. The mean age for the occurrence of these tumours is 15-71 years and they usually present in the reproductive period as a solitary slow growing painless mass in the Vulvar region which later causes discomfort during walking, sitting and during intercourse. The average tumour size ranges from 0.5 to 15 cms. [8]

Vulvar Leiomyomas are thought to originate from the smooth muscle components present within the round ligaments, erectile tissue and the Dartos muscle [11].

Vulvar Leiomyoma's are categorized into three categories namely - Leiomyoma's, atypical Leiomyoma's and Leiomyosarcomas . [12]

Recently Youssef et Al [9] reported a case of a 39 yrs. old P2L2 lady with a 2-3 cm solid mass in the external genitalia which enlarged in size to 15 cms. The lesion was excised and histopathology showed a Leiomyoma of the vulva.

Another case was reported in a 59 yrs old post-menopausal woman where the initial suspicion was a Bartholin's gland carcinoma.

Neilson et Al studied 25 cases of Leiomyomas of the vulva in which the patients presented with a painless mass. The most common pre-operative diagnosis was a Bartholin's gland cyst .There were 20 cases of Leiomyoma's of which 4 cases were atypical Leiomyoma's and 5 cases of Leiomyosarcomas. On follow up 4 cases of Leiomyosarcomas showed recurrence and only one patient had a recurrence after 10 years [13].

Ultrasonography is the most reliable widely diagnostic tool for Uterine and extra Uterine Leiomyoma's and magnetic resonance imaging is used in cases that are difficult to diagnose. Transperineal ultrasonography though not routinely done can be used to identify Leiomyoma's in the perineal region.

The differential diagnosis of Vulval swelling include Bartholin's cyst / abscess , Fibroma , Lipoma , Lymphangioma ,Soft tissue sarcomas and Neurogenic tumours .

Differentiating Leiomyoma's from atypical Leiomyoma's and Leiomyosarcomas is challenging both in terms of diagnosis, treatment and chances of recurrence. Tavassoli and Norris proposed the following diagnostic criteria for Leiomyosarcomas. [14]
More than 5 cms in greatest dimensions
Infiltrative margins
More than 5 mitotic figures/ 10 HPF

TREATMENT:

Lumpectomy remains the mainstay of treatment for Leiomyomas and atypical Leiomyomas followed by long-term follow up. [13]

The treatment of Leiomyosarcomas is wide local excision with negative margins with or without adjuvant therapy. [13,16]

Histopathology is advised in all cases of surgically excised specimen to rule out malignancy. Three patterns of cellular arrangements have been noted. Neilson et al found that 14 out of 25 cases consisted of spindle cells arranged in fascicles called the spindled pattern [13] and, The epithelioid pattern is seen in 12 % of Leiomyomas.[13,14]

The myxoid pattern is speculated to be a degenerative phenomenon related to Hormonal changes. [12,14,17]

Though Uterine Leiomyomas highly express ER and PR receptors and are hormone responsive., The expression of ER and PR receptors and hormone responsiveness of Vulval Leiomyomas warrants further studies since conflicting results have been noted with lesion not increasing in size during pregnancy and lesion showing enlargement in post-menopausal women.

Though the relationship between hormones and growth of Leiomyomas is still ambiguous, a selective ER receptor modulator may be given to prevent it's recurrence following surgery.[19]

CONCLUSION:

Leiomyomas of the Vulva is a very rare condition and is usually easily misdiagnosed as Bartholin's gland cyst. It should be kept as a differential diagnosis when a lady in late reproductive age group presents with unilateral swelling in the vulva which is firm in consistency and painless. Ultrasonography / MRI may be helpful in establishing the diagnosis. Distinguishing between benign and malignant forms of Vulval Leiomyomas is a diagnostic challenge due to it's rarity, which is the reason surgical excision and Histopathological examination is the mainstay for treatment. Long term follow up is advisable to detect early cases of recurrences.

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REFERENCES:

1. Levy RA, Winham WM, Byrant CS , et Al.Smooth muscle neoplasms of the vulva masquerading as Bartholin's gland duct cyst. . Proc (Bayl Univ Med Cent)2014; 27:25-27.
2. Weston G, Healy DL. Uterine Fibroids.In : Shaw RW, Luesley D, Monga A, editors. Gynaecology.4th edition. Edinburgh: Elsevier Science; 2011.p.473-85.
3. Hillard P. Benign diseases of the female reproductive tract.In: Berek J. Adashi E , Hillard P, editors. Novak's Gynaecology. 12 the edition. Baltimore; Willam& Wilkins; 1996. P 331- 97.
4. Kunhardt UrquizaE, de la Cruz SI, Fernández Martinez RL, Hernández Zúñiga VE. Myomatosis of rare localisation. Ginecol Obstet Mex 1997; 65 (12): 541- 544.
5. Fasih N, Prasad Shanbhogue AK, MacDonald DB, et Al. Leiomyomas beyond the uterus: unusual locations, rare manifestations. Radiographics 2008; 28(07): 1931- 1948.
6. Reyad MM, Gazvani MR , Khine MM. A rare case of primary Leiomyoma of the vulva . J. Obstet Gynaecol 2006; 26(01): 73-74.
7. Zhao T, Liu X , Lu Y . Myxoid epithelial Leiomyoma of the vulva,: A case report and literature review. Case Rep Obstet Gynaecol 2015; 2015: 894830
8. Pandey D , Shetty J , Saxena A, Srilatha PS. Leiomyoma in vulva: A diagnostic dilemma. Case Rep Obstet Gynaecol 2014; 2014: 386432.
9. Youssef A, Neji K, M' Barki M, et al . Leiomyoma of the vulva. Tunis Med 2013; 91: 78-80.
10. Kim HR, Yi BH, Lee HK, et al. Vulval epithelioid Leiomyoma in a pregnant woman.J

Obstet Gynaecol 2013; 33: 210-211.
11. Misumi S , Irie T, Fukuda K, Tada S , Hosomura Y . A case of deep soft tissue Leiomyoma : CT and MRI findings. Radiat Med. 2000; 18(4): 253-6.
12. Zhou J, Ha BK, Schubeck D, et al Myxoid epithelioid Leiomyoma of the vulva: A case report. Gynaecol Oncol 2006; 103: 342- 345.
13. G.P. Neilson, A.E. Rosenberg, F.C. Koerner , R.H. Young, and R.E. Scully, " Smooth muscle tumours of the vulva: a clinico- pathological study of 25 cases and review of the literature". The American Journal of Surgical Pathology, col.20, no.7, pp.779- 793, 1996.
14. Tavassoli FA, Norris HJ, .Smooth muscle tumours of the vulva. Obstet Gynaecol.1978; 53(2): 213- 7.
15. Nucci MR, Fletcher CD, Vulvovaginal soft tissue tumours: update and review. Histopathol 2000; 36: 97-108.
16. LoschA, Joura EA, Stani J, Breitenecker G, Lahodny J. Leiomyosarcoma of the vulva,: a case report. J Reprod Med. 2001; 46: 609-12.
17. Newman PL and Fletcher CD. Smooth muscle tumours of the external genitalia: clinico-pathological analysis of a series. Histopathology 1991; 18: 523-529.
18. Nemoto T, Shinoda M, Komatsuzaki K, et al Myxoid Leiomyoma of the Vulva mimicking aggressive angiomyxoma. Pathol Int 1994; 44: 454- 459.
19. Saeed NK, and Al- Jufairi ZA, . Bartholin's gland abscesses caused by streptococcus pneumoniae in a Primigravida. J Lab Physicians 2013; 5: 130- 132.