ISSN: 2576-2842

Case Report

Journal of Gynecology & Reproductive Medicine

Bulky Vulvo-Vaginal Leiomyoma, An Exceptional Location: A Case Report at The Teaching Hospital of Angre

Adjoby Roland*, Koffi Soh Victor, Lehie Bi Marc, Kouakou-Kouraogo Ramata, Akobe Privat, Loba Okoin Paul Jose, Soro Ngolo Alassane and Konan Koffi Joachim

Obstetrics and Gynaecology Department at the Teaching Hospital of Angre, Abidjan

***Corresponding author**
Adjoby Roland, Mother and Child Department, Félix Houphouet Boigny University of Abidjan, Obstetrics and Gynaecology Department at the Teaching Hospital of Angre.

Submitted: 14 Aug 2022; **Accepted:** 15 Nov 2022; **Published:** 23 Nov 2022

Citation: *Adjoby Roland, Koffi Soh Victor, Lehie Bi Marc, Kouakou-Kouraogo Ramata, Akobe Privat, Loba Okoin Paul Jose, Soro Ngolo Alassane and Konan Koffi Joachim (2022) Bulky Vulvo-Vaginal Leiomyoma, An Exceptional Location: A Case Report at The Teaching Hospital of Angre. J Gynecol Reprod Med, 6(4): 180-183.*

Abstract

Leiomyoma, known as a pathology of the uterus, consisting of fusocellular smooth muscle fibres and collagenous stroma, is rarely found at other sites. Leiomyoma of the vulva is an exceptional location. We report a case of vulvovaginal leiomyoma in a 44-year-old G2P2 patient, seen for a firm mass of the left lips evolving for 3 years with no other apparent signs. The surgical intervention allowed the removal of a tissue-like tumour of 9cm long axis, weighing 140 grams. The final histological diagnosis was a leiomyoma with no evidence of malignancy.

Keywords: Ectopic pelvic leiomyoma, Vulvar smooth muscle tumor, Metastatic benign leiomyoma

Introduction

The vulva is the site of many tumours. Leiomyomas constitute about 3.8% of all benign soft tissue tumours [1]. Leiomyoma is known to be a uterine localized pathology that usually occurs in women of childbearing age [1-3]. We report a rare case of a large leiomyoma that developed at the expense of the vulvovaginal floor in a 44-year-old female patient. The extrauterine predilection zone of the leiomyoma is the vulvar region [4].

Observation

This is patient E.Z.C, 44 years old, G2P2, with a history of caesarean section. She consulted us for a painless mass that was slowly growing and had been evolving for several years in the vulvovaginal region, associated with vulvovaginitis that was resistant to treatment and recurred. She tried a traditional herbal treatment without success. In view of the volume of the mass and the functional discomfort caused, she consulted the Teaching Hospital of Angré. The clinical examination revealed a firm, bumpy vulvar tumour plunging into the pelvic floor (Figure 1), no inguinal lymphadenopathy was detected. Ultrasound examination revealed a well-circumscribed solid vascularised mass.Pelvic MRI showed that it was a descending extension of a mass measuring 9cmx5cmx4cm cm near the vagina. The density was similar to muscle tissue with internal vasculature. There was no evidence of metastasis (Figures 2 and 3). A biopsy was in favour of a leiomyoma. The patient underwent surgical excision resulting in the removal of a solid, lumpy mass measuring 9cm x 5cm (Figures 4, 5 and 6) weighing 140g. Pathological examination of the surgical specimen confirmed the histological nature of a vulvovaginal leiomyoma.

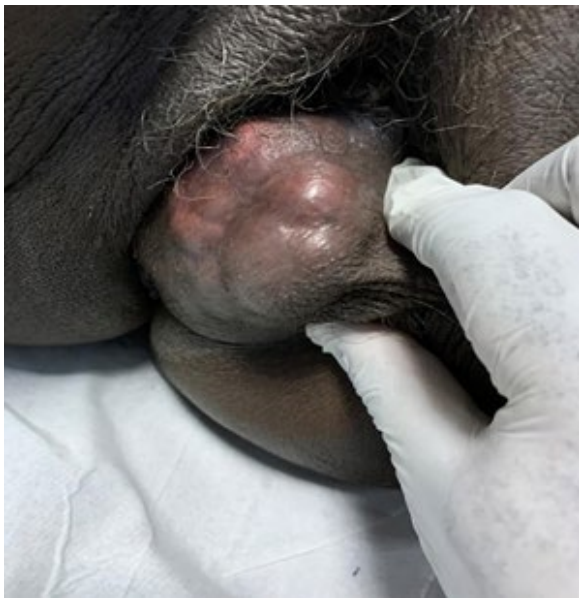

Figure 1: Bulky vulvovaginal tumour

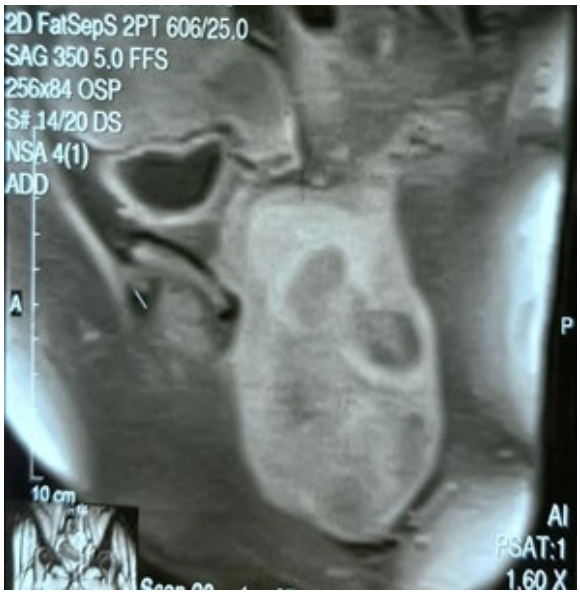

Figure 2: MRI appearance

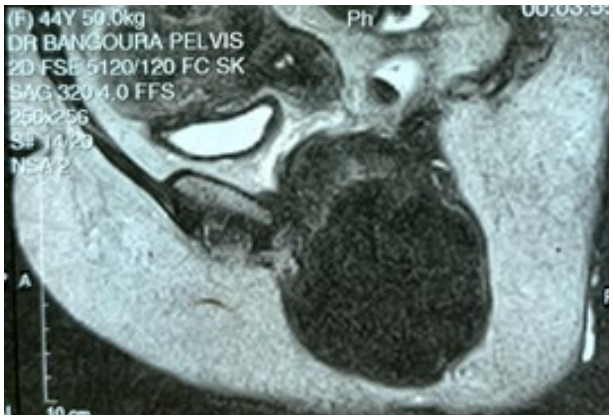

Figure 3: MRI appearance

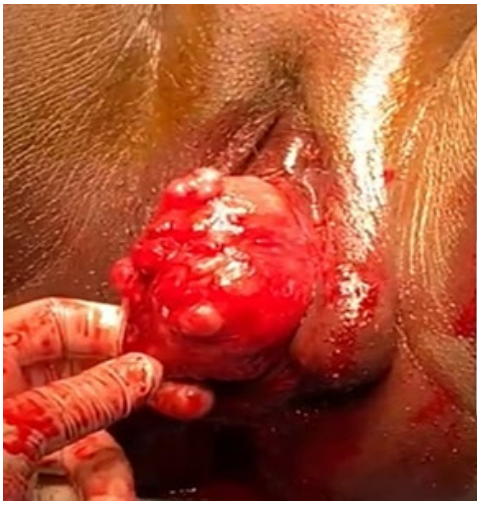

Figure 4: Surgical View

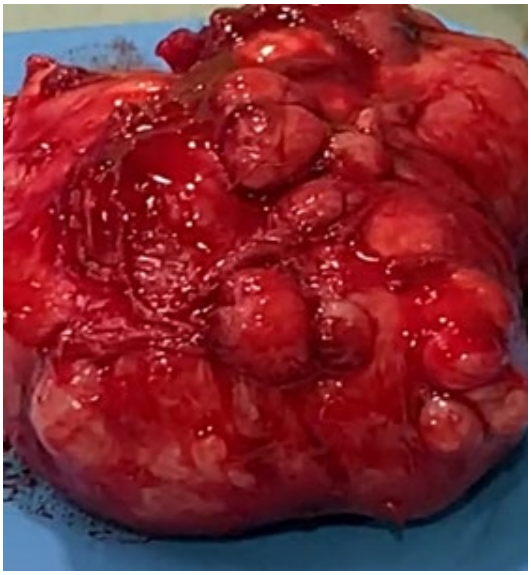

Figure 5: Solid, lumpy tumour

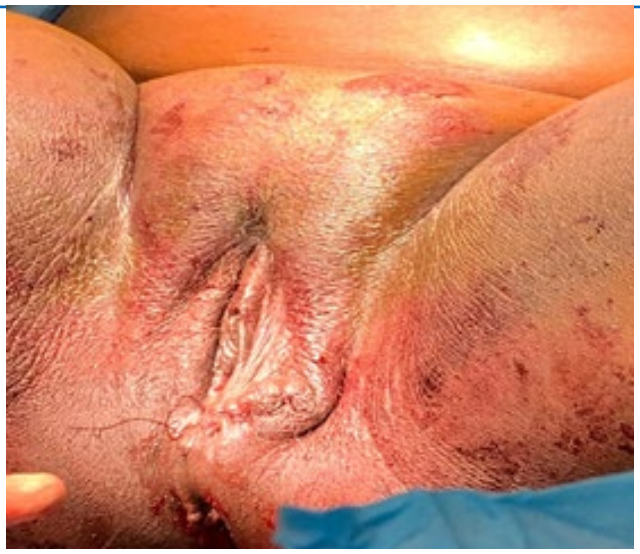

Figure 6 : Aspect of the vulva at the end of the operation

Discussion

Uterine leiomyomas occur in 60-80% of women over 35 years of age in the black race [5]. Leiomyomas are predominantly found in the myometrium [2-6]. Ectopic locations are rarer and present a greater diagnostic challenge. In our case, the location was at the vulva-vaginal level, which is exceptional. In the majority of published cases, the size was less than 5 cm at the time of diagnosis and was located in the anterior wall of the vagina and only 10-20% in the lateral wall [4,7].

In Nielsen's series, most cases had a painless mass, but sometimes there were symptoms of pruritus and erythema [3]. In our patient, it was more the functional discomfort and repeated vaginitis that prompted the referral to hospital. In the literature, the main presenting symptoms were heaviness, dyspareunia and vulvovaginitis, sometimes the discovery was incidental [4,8,9].

The most useful modalities for detecting ectopic leiomyomas are ultrasound, CT and magnetic resonance imaging (MRI). The superb contrast resolution and multiplanar capabilities of MRI imaging make it particularly useful in characterising these tumours, which typically show a low signal intensity similar to that of smooth muscle on T2-weighted images. The radiologist's recognition of these and other features can help guide the clinician towards timely and appropriate management and away from unnecessary and potentially dangerous treatments [4-11].

The physiopathogenesis of ectopic leiomyomas remains poorly understood. The diagnosis of ectopic leiomyoma is based on anatomopathological examination, with standard histology and immunohistochemistry comparing staining by antidesmin and antiactin smooth muscle antibodies. The main differential diagnoses are fibroma, fibrothecoma, ovarian fibrosarcoma, and stromal tumours of the digestive type [12].

The differentiation between benign and malignant lesions is somewhat difficult. Nielsen proposed a classification that distinguishes between the two lesions according to 4 criteria: more than 5 cm in greatest dimension, infiltrative margins, more than 5 mitotic figures per 10 fields at high magnification and moderate to severe cytological atypia. If 3 or all of the features are found, the tumour is considered a sarcoma. Benign but atypical leiomyomas meet only 2 features, and benign leiomyomas are those with 1 or none of the features [3]. Another method that can help distinguish malignant from benign tumours is MRI [10].

Surgical removal of the tumour remains the only treatment for vulvovaginal leiomyoma. Due to the exception of cases described in the literature, it is difficult to accurately predict the risk of recurrence and to differentiate between benign and malignant tumours, hence the importance of long-term follow-up [6,13]. Leiomyoma of the vulva is exceptionally rare and should be considered in the differential diagnosis of a vulvar mass.

Three main histological profiles have been identified: fusiform, epithelioid and myxoid [14]. Some teams have performed hemivulvectomy in older patients [15].

Ultimately, ectopic leiomyoma does not fall into a precise nosological framework and does not present specific criteria of benignity or malignancy, so no evolutionary potential can be defined. The precautionary principle therefore calls for extreme caution after excision, and the question of monitoring and long-term management of patients must be addressed [12].

Conclusion

Vulvovaginal leiomyoma is an exceptional benign tumour. Confirmatory diagnosis is often made only after resection of the mass, which is often misdiagnosed as a malignant tumour. Several hypotheses have been put forward to explain their origin, but the exact etiology remains unknown. Treatment is based on total removal of the mass.

References

1. Kurdi, S., Arafat, A. S., Almegbel, M., & Aladham, M. (2016). Leiomyoma of the Vulva: a diagnostic challenge case report. Case reports in obstetrics and gynecology, 2016.
2. Newman, P. L., & Fletcher, C. D. M. (1991). Smooth muscle tumours of the external genitalia: clinicopathological analysis of a series. Histopathology, 18(6), 523-529.
3. Nielsen, G. P., Rosenberg, A. E., Koerner, F. C., Young, R. H., & Scully, R. E. (1996). Smooth-muscle tumors of the vulva: a clinicopathological study of 25 cases and review of the literature. The American journal of surgical pathology, 20(7), 779-793.
4. Nidhanee, S. V., Maiti, S., Shareef, D., & Holland, N. (2009). An unusual presentation of a vaginal leiomyoma in a postmenopausal hysterectomised woman: a case report. Cases journal, 2(1), 1-3.
5. Fanny, M., Fomba, M., Aka, E., Adjoussou, S., Olou, L., Koffi, A., ... & Koné, M. (2018). Prevention of bleeding during laparotomic myomectomy in Sub-Saharan Africa: Contribution to the tourniquet on the uterine isthmus. Gynecologie, obstetrique, fertilite & senologie, 46(10-11), 681-685.
6. Fasih, N., Prasad Shanbhogue, A. K., Macdonald, D. B., Fraser-Hill, M. A., Papadatos, D., Kielar, A. Z., ... & Atri, M. (2008). Leiomyomas beyond the uterus: unusual locations, rare manifestations. Radiographics, 28(7), 1931-1948.
7. Gowri, R., Soundararaghavan, S., Oumachigui, A., Sistla, S. C., & Iyengar, K. R. (2003). Leiomyoma of the vagina: an unusual presentation. Journal of obstetrics and gynaecology research, 29(6), 395-398.
8. Hissane, E. M., Fasla, H., Mahdaoui, S., Noun, M., Hermas, S., & Samouh, N. (2011). Léiomyome de la vulve: à propos d'un cas et revue de la littérature. Imagerie de la Femme, 21(4), 179-181.
9. Chakrabarti, I., De, A., & Pati, S. (2011). Vaginal leiomyoma. Journal of mid-life health, 2(1), 42.
10. Akakpo J, Lauratet B, Badachi Y, Genestie C, Capron F, Lefranc J, et al. (2007) Les lésions vulvo-vaginales: aspects en imagerie avec corrélation anatomo-clinique. J Radiol 88(10):1512-1513
11. El Khader, A., Lahkim, M., El Barni, R., & Achour, A. (2015). Le léiomyome vulvo-vaginal: une entité exceptionnelle. Journal Africain du Cancer/African Journal of Cancer, 7(4), 244-246.
12. Roue, A., Laboisse, C., Winer, N., Darnis, E., Bouquin, R., Lopes, P., & Philippe, H. J. (2007). Léiomyome pelvien extra-utérin: diagnostic et prise en charge. Journal de gynécologie obstétrique et biologie de la reproduction, 36(4), 403-408.
13. Zhao, T., Liu, X., & Lu, Y. (2015). Myxoid epithelial leiomyoma of the vulva: a case report and literature review. Case reports in obstetrics and gynecology, 2015.
14. Sun, C., Zou, J., Wang, Q., Wang, Q., Han, L., Batchu, N., ... & Li, Q. (2018). Review of the pathophysiology, diagnosis, and therapy of vulvar leiomyoma, a rare gynecological tumor. Journal of International Medical Research, 46(2), 663-674.
15. Pokoradi, A., & Agrawal, A. (2021). Léiomyome volumineux bénin de la vulve: une localisation extra-utérine insolite. Journal of Obstetrics and Gynaecology Canada: JOGC= Journal D'obstetrique et Gynecologie du Canada: JOGC.: