

Case Report: Phyllodes tumour in the vulva - a rare case.

Dupey J, Rafiqi L, Arif S.

Department of Cellular Pathology, Princess Alexandra Hospital NHS Trust, Harlow Essex.

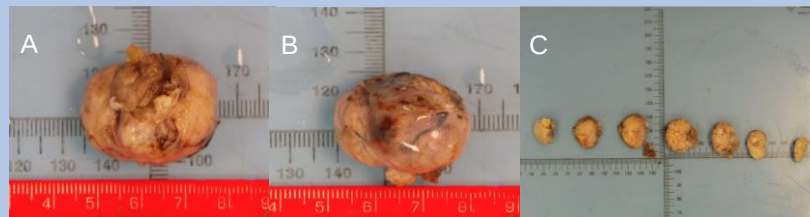
Introduction

Phyllodes tumour (PT) is a fibroepithelial proliferation most commonly seen in the breast. Occurrences outside of the breast may rarely occur in the anogenital region including the vulva. Only 19 cases have been described in the literature¹. Mammary tissue in the vulva was once thought to arise from remnants of the so-called 'milk-line', but is now believed they arise from local anogenital mammary-like glands². These may be the origin of a number of benign glandular lesions including benign PT. Whatever the case may be, vulval PT is rare. Here we present a rare case of a benign PT in the vulva.

Case Report

A 35-year-old female presented with a 6-month history of a painless left-sided vulval swelling. The lesion was noted to be increasing in size. No red flag symptoms were noted. The past medical history included endometrial ablation for heavy menstrual bleeding. On examination, there was a 4 x 3 cm left labial mass with no signs of a punctum and no evidence of infection. The lesion was surgically excised under local anaesthetic with 7 days antibiotic cover given.

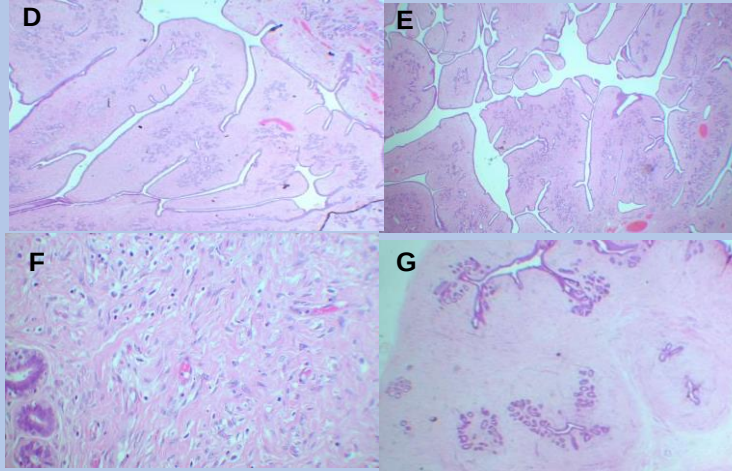
In the laboratory, the macroscopic appearance was that of a 31 x 25 x 22 mm nodule with a thin fibrous capsule. The cut surface was pale and friable.



A and B. Anterior and posterior views of specimen. **C.** Serial slices.

Haematoxylin and eosin (H&E) stained slides revealed a well circumscribed lesion composed of mammary type epithelium compressed by stroma, imparting a leaf-life architecture (see microscopic images).

Images (microscopic)



D and E. Low power view (2x) of the lesion showing typical 'leaf-like' fronds and compressed mammary-type epithelium.

F. High Power view (20x) Mildly hypercellular stroma but no significant mitotic activity or atypia.

G. For comparison, a fibroadenoma (2x view) of the vulva which curiously came to the department shortly after the PT!

Conclusion

- Vulvar PTs are exceedingly rare tumours and very few cases have been reported so far.
- We present this case to bring about awareness of this uncommon neoplasm occurring at an extremely unusual site.
- Prognosis is unclear due to the rarity of these neoplasms and recurrences have occurred even in 'benign' cases.
- Excision with clear margins is the mainstay of treatment with follow up advisable for any grade of PT³.
- Though metastatic disease has not been reported, vulvar PTs can recur and hence close follow-up is warranted.

Discussion

PT is an uncommon fibroepithelial breast neoplasm characterised by hypercellular stroma forming leaf-like intraluminal projections. The occurrence of this neoplasm in vulva is very rare. Neoplastic conditions of the vulva having morphologic similarities to their breast counterparts have been reported. Vulvar PTs typically present as a unilateral painless mass, most often involving labia majora, labia minora, or inter-labial cleft³. Histologically these tumours show the same features seen in PTs of the breast and are graded as benign, borderline or malignant according to stromal factors (cellularity, atypia, overgrowth), mitotic count, infiltrative tumour borders and presence of heterologous elements⁴.

In this case, histology revealed a biphasic tumour with mild stromal hypercellularity, very occasional sub-epithelial mitotic figures and areas of leaf-like configuration. A differential diagnosis of fibroadenoma was considered due to the morphologic overlap and the fact that vulvar fibroadenomas are more common than vulvar PTs. Opinion from both gynaecologic and soft tissue experts confirmed this case as benign PT. The mainstay of therapy is surgical excision with clear margins⁵. In this case, completeness of excision could not be assessed due to disruption of fibrous capsule. There is inadequate data on the long-term behaviour of vulvar PTs after excision but metastatic disease has not been reported in the literature. Recurrence has been described in a case of benign vulvar PT, most likely due to incomplete excision⁵. Hence, close follow-up of this case is mandatory.

References

1. Somasegar S, Han L, Miller A, et al. Phyllodes tumor of the vulva: A case report and literature review highlighting a novel manifestation of Cowden syndrome. *Gynecologic Oncology Reports*. 2021 May;36:100752. DOI: 10.1016/j.gore.2021.100752.
2. Kurman, R. J., Ellenson, L. H., & Ronnett, B. M., Brigitte M.R., (2019) *Blaustein's Pathology of the Female Genital Tract (Springer Reference)* (7th ed. 2019 ed.) Springer.
3. Mannan A.A.S.R, Kahvic M, Abdel Aziz A.H. Phyllodes tumor of the vulva: Report of a rare case and review of the literature. *Am.J.Dermatopathol*. 2010;32(4), 384-386.
4. Lee S, Nodit L. Phyllodes tumor of vulva: a brief diagnostic review. *Arch Pathol Lab Med*. 2014 Nov;138(11):1546-50. doi: 10.5858/arpa.2013-0581-RS. PMID: 25357118.
5. Lee S, Nodit L. Phyllodes tumor of vulva: a brief diagnostic review. *Arch Pathol Lab Med*. 2014 Nov;13(11):1546-50.

Acknowledgements.

Our acknowledgements to Dr Saimah Arif for providing this wonderful case.

Declaration of interests: The authors have no conflict of interests to declare.