



Vulvar Fibroadenoma: An Unusual Cause of Vulvar Mass

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A 21-year-old nulliparous woman was admitted to our hospital with a 6-month clinical history of vulvar mass. Physical examination revealed a painless, pedunculated, nodular mass on the right labia major. The mass was excised. Macroscopic examination revealed that the lesion was 5.4 × 4.8 × 3.9 cm in dimension and completely covered with skin. Serial sectioning revealed a homogeneous, lobulated, and white cut surface (Fig. 1a). Microscopic examination revealed that the lesion comprised numerous different-sized ducts embedded in a loose collagenous stroma. The ducts had dual layers, including the inner epithelial and outer myoepithelial layers (Fig. 1b). No stromal overgrowth, hypercellularity, or increased mitotic activity was identified. Immunohistochemical staining revealed luminal epithelial cells positive for GATA3 and the estrogen receptor (Fig. 1c). The case was diagnosed as vulvar fibroadenoma arising in the right labia major. Written informed consent was obtained from the patient.

Vulvar lesions are infrequently found in women, and fibroadenoma is one of the rare benign fibroepithelial neoplasms with an uncertain histogenesis. Two theories have been proposed on this neoplasm. The first theory suggests that vulvar fibroadenoma originates from ectopic breast tissue derived from incomplete involution of milk line during embryogenic development. Ectopic breast tissue has been most frequently found in the axillary region followed by the vulva (1). Hormonal changes during pregnancy or lactation promote proliferation of ectopic tissue, which leads to benign or malignant processes. The second theory suggests that this lesion is derived from mammary-like anogenital glands closely related to eccrine glands. Fibroepithelial lesions arising in the vulvar and perineal regions have been reported in the literature. They are most commonly observed in women during pregnancy, lactation, or menstrual period. Vulvar fibroadenomas in postmenopausal women have also been reported in the literature. Our case is unusual because the patient had no history of pregnancy or lactation (2, 3).

In conclusion, vulvar fibroadenoma is a rare benign lesion that can be a diagnostic challenge for both clinicians and pathologists. It should be kept in mind during the differential diagnosis of vulvar mass in women of any age and should be confirmed by excisional biopsy.

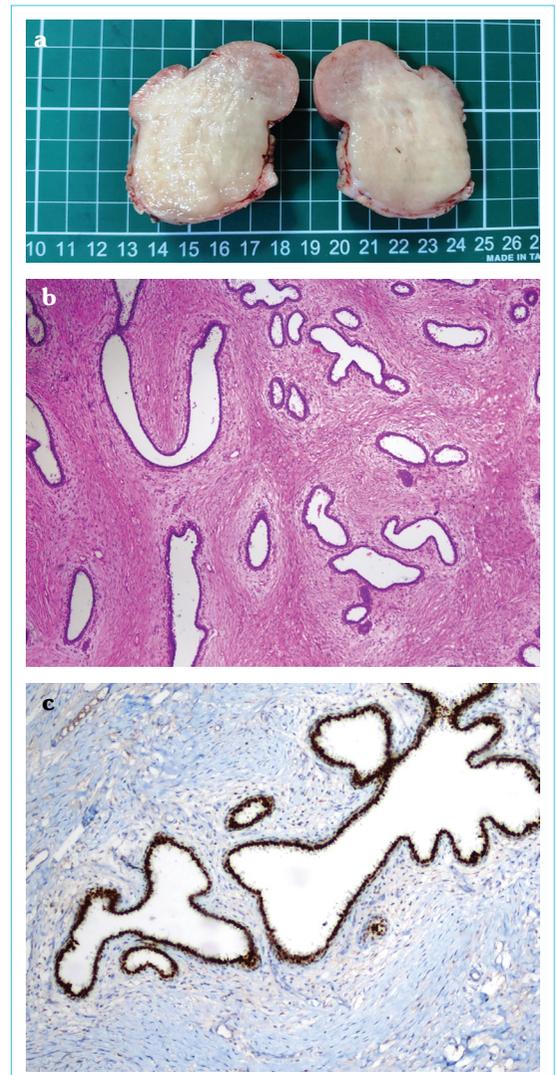


Figure 1. (a) Macroscopic examination result revealing an encapsulated, solid, gray-white, and lobulated mass. The cut surface of the lesion is pale, white, and lobulated. (b) Pericanalicular growth pattern of the tumor in a loose collagenous stroma (hematoxylin-eosin staining, original magnification ×200). (c) Expression of luminal epithelial cells positive for the estrogen receptor (immunohistochemistry, original magnification ×400)

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