A Rare Case: Labial Angiomyofibroblastoma

G. Sach - Northern Sydney Local Health District, Sydney NSW Australia

Background

Angiomyofibroblastoma (AMFB) is a rare, benign, soft tissue tumour of the lower genital tract. AMFB may be present for weeks, or even years, before a diagnosis is made, and are commonly misdiagnosed as Bartholin gland cysts or labial abscesses.

Case Study

A 20-year-old woman presented with vulval discomfort on a background of 2 years of a lower labia majora mass, treated with multiple courses of antibiotics with no improvement. A 5-6cm tender, fluctuant mass was noted, with mild surrounding erythema and overlying skin intact. A differential diagnosis of a Bartholin's gland cyst or labial abscess was made, and the patient proceeded to incision and drainage in operating theatres.

Operative findings were a fluctuant labial mas with no pus drainable, consisting of soft tissue suspected to be solidified pus. Histopathology demonstrated a well-circumscribed neoplasm composed of alternating zones of cellularity, as well as oedematous stroma with thin-walled vessels. A diagnosis of AMFB was confirmed following tertiary review of the histopathological results.

Discussion

AMFB is a rare, benign, soft tissue tumour that primarily affects the vulvovaginal region of women in the third and fourth decade of life. First described in 1992, AMFBs are characterised as well-circumscribed, painless, slow growing mesenchymal tumours with a favourable prognosis following excision and no known malignant potential.

Clinically, AMFBs are frequently misdiagnosed as Bartholin gland cysts or labial abscess', as in the case presented. On histopathology, AMFBs are characterised by alternating hypocellular and hypercellular zones and abundant vessels (See Fig 1 & 2). Histopathological analysis allows differentiation between AMFB and more aggressive neoplasms of the lower genital tract, such as angiomyxoma.

Early diagnosis and surgical excision have a positive prognosis, with a low rate of recurrence or complications. The case presented adds to the current evidence base of the presentation and management of the rare AMFB in young females presenting with vulvovaginal masses.

Conclusion

The case presented highlights the clinical and histopathological features of labial AMFB, a presentation frequently misdiagnosed as a Bartholin's or labial abscess prior to histological examination. Due to the similarities between AMFB and the more aggressive angiomyxoma, greater awareness and understanding of the differentiating clinical and histological features is essential for clinicians who may be managing these lesions in patients prior to a confirmed histological diagnosis.

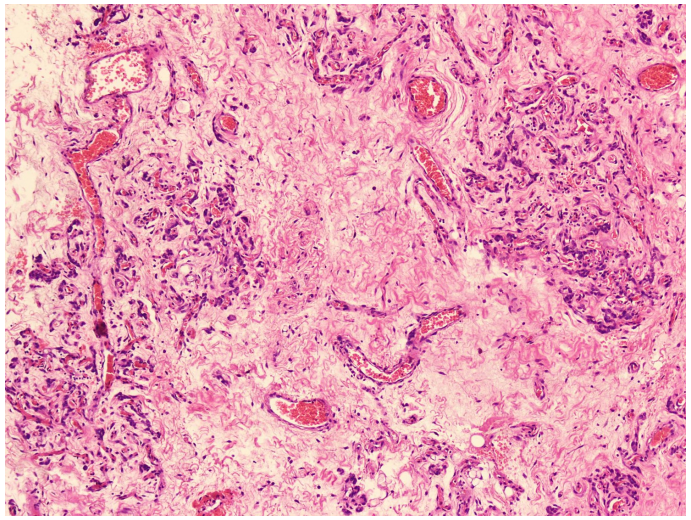

Figure 1. H&E stain demonstrating tumor with alternating hypocellular slender collagen fibrils and hypercellular areas around blood vessels. (Source: PathologyOutlines)

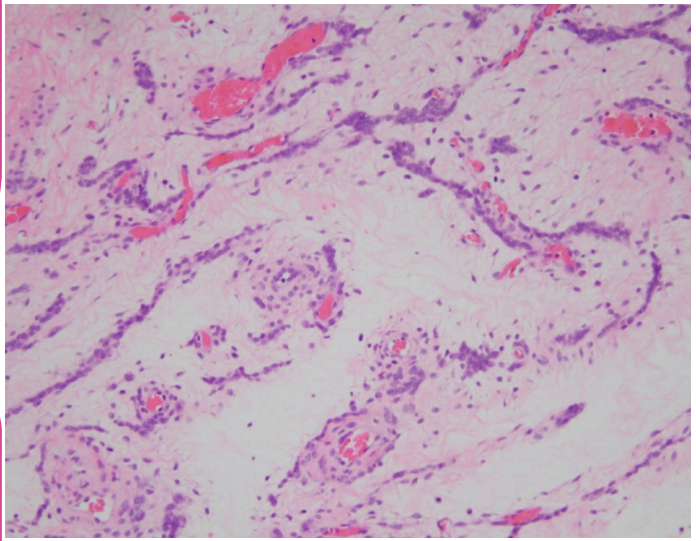

Figure 2. H&E stain demonstrating loose stroma with spindle cells and cords of epitheloid cells around prominent blood vessels with thin to thick vascular wall (Source: PathologyOutlines)

References available on request. Contact: gabrielle.sach@gmail.com.