

## Case report : Benign Adenomyoepithelioma

Amal Khalid ; Salma Al - Ramadhani ; Preethi Gopinath  
The Princess Alexandra Hospital, Harlow, England

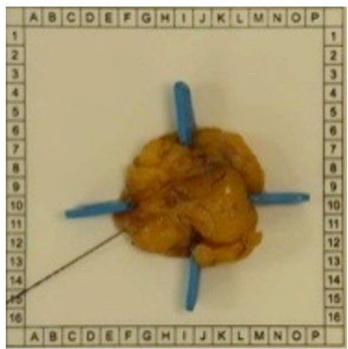


Fig 1 - Wide Local Excision

**Abstract :**  
I describe a rare case of benign adenomyoepithelioma. The clinical, radiological, and pathological findings are discussed in order to raise awareness of this rare entity.

**Background :**  
Adenomyoepithelioma accounts for less than 0.5% of breast tumors, with a mean age of 54 years. They present as single, centrally located, palpable mass, occasionally with serous nipple discharge, and have a mean size of 11mm. Rarely, they may be associated with genetic conditions including Neurofibromatosis Type 1. There are benign, atypical, and malignant variants of Adenomyoepithelioma, and 4 histological variants, namely tubular, lobulated, spindle-cell, and adenosis are described. Recurrence may show atypical or malignant features, commonly seen in the tubular variant, and may be avoided with early diagnosis, and evaluation of resection margins, to ensure complete excision. Undiagnosed atypia or increased mitotic activity may lead to metastasis of tumor.

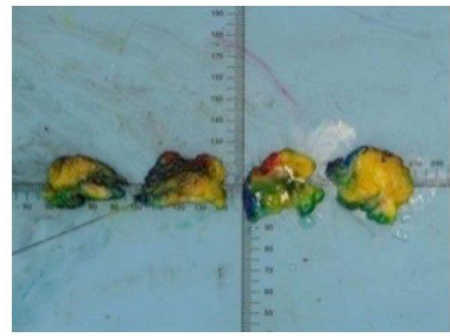


Fig 2 - Wide Local Excision

**Clinical Presentation**  
36 year old woman, presented with pain for 3-4 months along with the feeling of lumpiness in the right subareolar area. No previous history of breast disease.

**Radiological Findings :**  
Ultrasound breast :  
A hypo-echoic lesion measuring 4x3x3 mm was identified, at 7 o'clock position, which was part solid, part cystic. The rest of the breast tissue was normal.

**Fine needle aspiration :**  
The patient underwent FNA of the lesion, and the cytology report showed :  

- Cellular aspirate with numerous ductal epithelial cells and areas of papillary architecture
- Focally hyaline globules were present
- Numerous bare nuclei, histiocytes and scattered cells with intracytoplasmic mucin were seen
- Conclusion: Uncertain, ? Inspissated cyst, C3
- Core biopsy was advised.

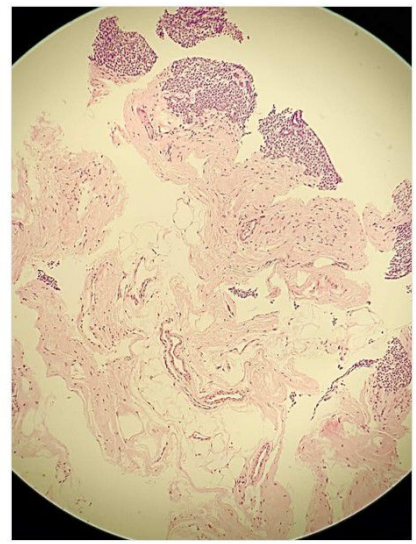


Fig 3 - Core Biopsy

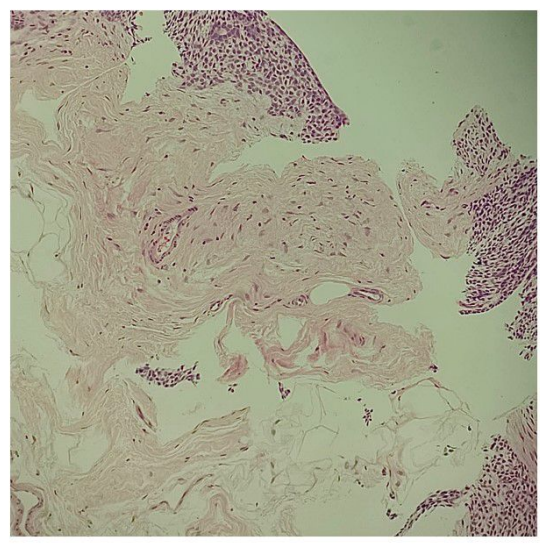


Fig 4 - Core Biopsy

**Core Biopsy :**

- Biphasic cell population characterized by :
  - Proliferation of cells with clear cytoplasm, showing spindling, resembling myoepithelial cells ( P63 +ve, Calponin -ve ) ( Fig 1, Fig 2 )
  - Small ductal tubular structures formed by cells with basophilic cytoplasm ( ER +ve, EMA +ve, CK +ve, GATA3 +ve ) ( Fig 1, Fig 2 )
- No cytological atypia, necrosis or mitosis was seen.

**Conclusion :**

- An unusual lesion, with epithelial and myoepithelial features, favoring Adenomyoepithelioma.
- B3 uncertain, without epithelial atypia
- A complete open excision was done, and histology confirmed a benign Adenomyoepithelioma, which was completely excised.

**Discussion :**  
The purpose of the discussion is to mainly focus on the identification of the lesion, and to raise awareness in understanding the different patterns of the presentation. This may help, not only in improving the recognition of it, but also guiding further in decision making and management, and to ensure adequate excision to prevent recurrence or metastasis.