

MALE BREAST ADENOMYOEPITHELIOMA- A CASE REPORT AND LITERATURE REVIEW

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INTRODUCTION

Adenomyoepithelioma is an uncommon primary breast tumor characterized by a biphasic proliferation of epithelial and myoepithelial cells which was first described by Hampperl in 1970. The largest reported series had been by Tavassoli (1991) who in reported 27 cases. Most of the others have been one or two case reports. Except for two in male patients [Tamura et al., 1993, Berna et al., 1997] all the reported cases have been in females. We hereby report an additional case of adenomyoepithelioma in a young male patient.

Keywords: Adenomyoepithelioma, Breast, Male, Presentation,

CASE REPORT

A 22-year-old male presented with a painless lump in the left breast. There was no family history of breast cancer. Examination revealed a 20mm by 20mm lump in the sub-areola region of the breast. Both the nipple and the areola were otherwise normal. There was no lymphadenopathy. A differential diagnosis of breast fibroadenoma and breast cancer was made. Breast ultrasound confirmed a well-defined oval hypoechoic lump measuring approximately 14 x 9.2 mm. The appearance suggests a fibroadenoma or fibrofatty mass. The lesion was cored biopsied with ultrasound guidance under

local anaesthesia. The histology sections show an atypical proliferation of epithelial element within a partly myxoid stroma. (Fig.1a & 1b). The epithelial elements form tubules, cribriform structures and trabeculae. Many of the cells contain vacuolated cytoplasm. Focal apocrine metaplasia was present. (Fig.1c) Immunostaining for 34BE12 highlights a population of myoepithelial cells and some area of myoepithelial hyperplasia (Fig.2). The appearances overall were in keeping with an adenomyoepithelioma of the breast.

DISCUSSION

Adenomyoepitheliomas of the breast are rare tumors characterized by a biphasic proliferation of inner (ductal) epithelial and outer myoepithelial cells, arranged in spindled sheets, cords, tubules, and/or lobules. They are generally considered to be benign but can recur locally. Malignancy may arise either through malignant transformation of one of the two cellular components or through malignant transformation of both [Atif et al., 2000]. Cases of `benign` adenomyoepithelioma with metastases to the lung have been reported [Nadelman et al., 2006]. Treatment of benign adenomyoepithelioma is a wide local excision with a clear margin and careful follow because of the risk of local recurrence and possible malignant transformation.

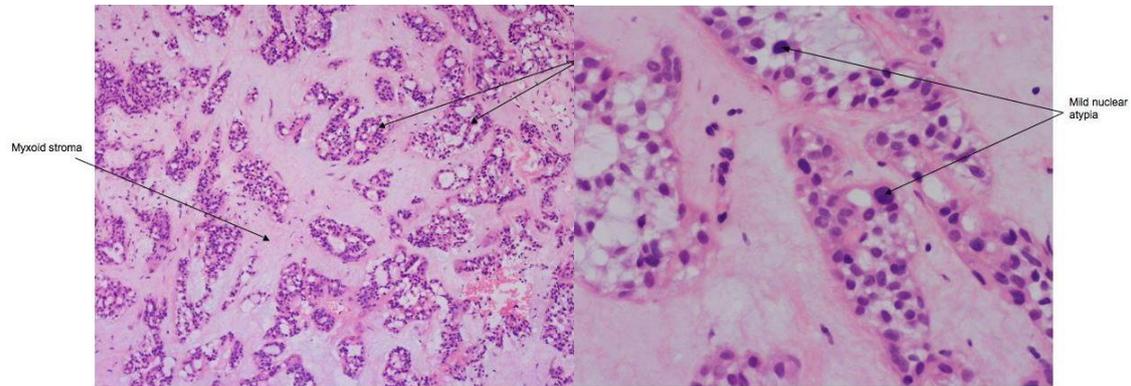


Fig.1a: H&E stain Atypical proliferation of epithelial element within a partly myxoidstroma.

Fig.1b:H&E stain Higher magnification showing nuclear atypia

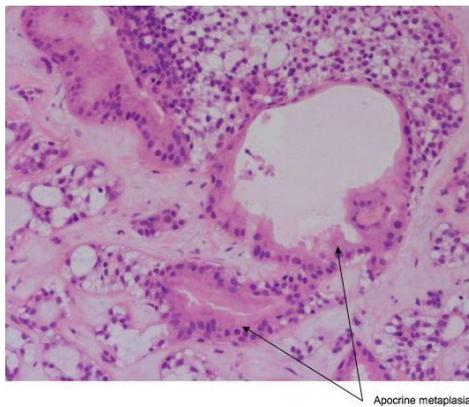


Fig.1c:H&E stain. Higher magnification showing Apocrine metaplasia

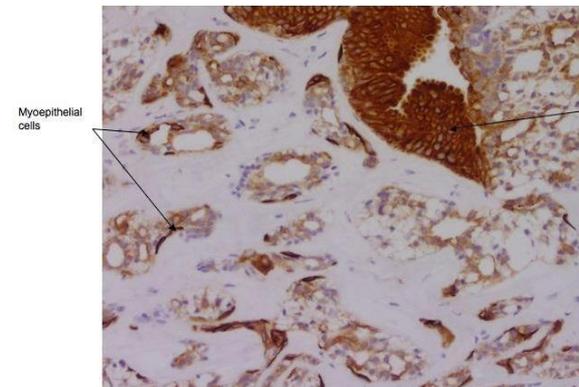


Fig. 2.Immunostaining for 34BE12 showing a population of myoepithelial cells and areas of myoepithelial hyperplasia

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REFERENCES

Atif A. Ahmed, Debra S. Heller (2000): Malignant Adenomyoepithelioma of the breast with malignant proliferation of epithelial and myoepithelial elements. Archives of Pathology & Laboratory Medicine:124(4): 632-636.

Berna JD, ArcasI, BallesterA, Bas A (1997): Adenomyoepithelioma of the breast in a male. AJR. American journal of roentgenology. 1997.169:917-918.

Hamperl H (1970): The myoepithelia (myoepithelial cells). Normal state; regressive changes; hyperplasia; tumors.Curr Top Pathol 53:161-220.

Nadelman CM, Leslie KO; Fishbein MC (2006): “Benign” metastasizing adenomyo epithelioma of the breast: a report of 2 cases. Arch Pathol lab Med. 130:1349-1353

Tamura G., Monma N., Suzuki Y., Satodate R., Abe H (1993): Adenomyo epithelioma (myoepithelioma) of the breast in a male. Hum Pathol, 24:678-681

Tavassoli FA (1991): Myoepithelia lesions of the breast. Myo epitheliosis, adenomyo epithelioma and myoepithelial carcinoma. Am J Surg Pathol. 15:554-568