

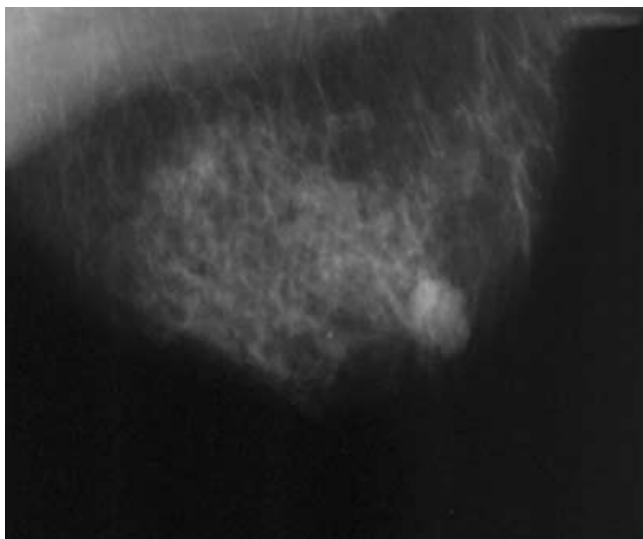
## BREAST IMAGES

# Pleomorphic Adenoma of the Breast

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**A** 59-year-old woman presented with a subareolar mass of the left breast. The lesion was described as firm in consistency; examination with mammography and sonography identified a 2 cm lobulated mass with irregular margins (Figs 1 and 2). Ultrasound-guided fine-needle aspiration (FNA) cytology revealed the presence of laminar aggregates of epithelial elements with elongated and polymorphic nuclei. Other features included the presence of myxoid tissue containing spindle cells and fragments of cartilaginous stroma (Fig. 3a,b). The cytologic diagnosis was benign lesion compatible with mixed tumor.



**Figure 1.** Mammography, left mediolateral oblique view, shows a subareolar mass with lobulated margins.

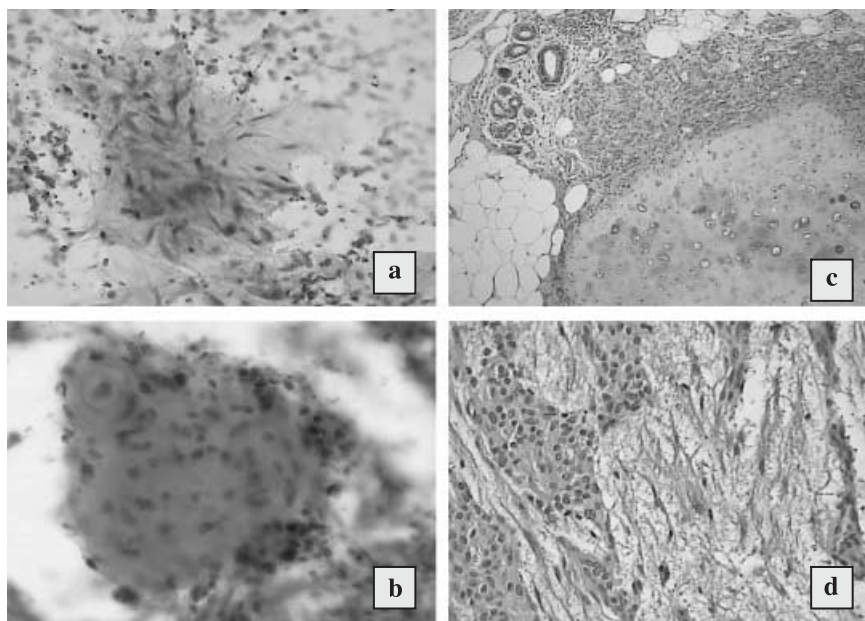
In view of the benign nature of the mass, a local excision was performed. The resection specimen consisted of a fragment of mammary tissue that measured 6 cm × 5 cm × 3 cm and comprised a well-circumscribed 2 cm mass with a pale white color. Histologically the lesion showed a mixture of epithelial cells surrounded by an outer layer of myoepithelial cells; stroma contained cartilaginous and myxoid tissue with spindle and stellate cells (Fig. 3c,d). The epithelial component was arranged as tubular structures and cords of cuboidal cells with small oval nuclei.

Knowledge of the occurrence of pleomorphic adenomas in the breast, together with careful assessment of the cytologic features present should avoid the mistaken diagnosis of malignancy and prevent unnecessarily overaggressive surgery.



**Figure 2.** Sonography shows an irregular 2 cm hypoechoic mass.

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**Figure 3.** (a,b) FNA cytology revealed the presence of laminar aggregates of epithelial elements with elongated and polymorphic nuclei, myxoid tissue containing spindle cells, and fragments of cartilaginous stroma (magnification  $\times 400$ ). (c,d) Histologically the stroma contains cartilaginous and myxoid tissue with spindle and stellate cells (magnification  $\times 200$ ;  $\times 400$ ).