

Phyllodes Tumor of the Breast

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Section: Breast imaging

Imaging Technique: Ultrasound

Imaging Technique: CT

Case Type: Clinical Cases

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Patient: 60 years, female

Clinical History:

Known benign right-sided breast mass since 1989. In 1994, the lesion suddenly increased in size but she refused, for personal reasons, any medical care at that moment. Finally in May 1995, she was admitted for surgical treatment. Clinical examination revealed an enormous nodular tumor of 30 cm in diameter in the right breast. Periareolar skin ulcerations were secondarily associated to the extreme skin distension. No axillary nodes were felt. Ultrasonography, CT scan and fine needle aspiration biopsy were performed.

Imaging Findings:

The patient is nulliparous and is known since 1989 to have a benign right-sided breast mass. In 1994, the lesion suddenly increased in size but she refused, for personal reasons, any medical care at that moment. Finally in May 1995, she was admitted for surgical treatment. Clinical examination revealed an enormous nodular tumor of 30 cm in diameter in the right breast. Periareolar skin ulcerations were secondarily associated to the extreme skin distension. No axillary nodes were felt. Ultrasonography, CT scan and fine needle aspiration biopsy were performed.

Discussion:

Phyllodes tumor is a rare breast neoplasm representing 0,3% to 1% of all breast tumors. It mostly appears during the 5th or 6th decade as a large, benign-looking breast mass but with an unpredictable clinical behavior. It is a locally invasive tumor which rarely metastasises. Mammography mostly shows an aspecific rounded or lobulated mass lesion. Clinical examination, mammography, CT scan and cytology are of little help to obtain preoperative diagnosis. Ultrasonography discloses a well-defined mass with single or multiple, round or cleftlike cystic spaces. There are no reliable US criteria allowing distinction between benign and malignant phyllodes tumors. Histologically, it consists of a mixed connective tissue-epithelial neoplasia where malignancy (5%) is always stroma-derived. Differentiation of benign, malignant and borderline tumors is based only on microscopic findings. Transformation of its stroma into different types of malignant mesenchymal sarcoma can occur. In the literature, extreme tumor size of 25 cm and weight of 4 kg have been reported. Recommended treatment for large, benign phyllodes tumors is mastectomy because of the necessity of tumor free margin.

Differential Diagnosis List: Phyllodes tumor of the breast

Final Diagnosis: Phyllodes tumor of the breast

References:

Buchberger W, Strasser K, Heim K et al. Phyllodes tumor: findings on mammography, sonography and aspiration

cytology in 10 cases. AJR 1991; 157:715-719. (PMID: [1654022](#))

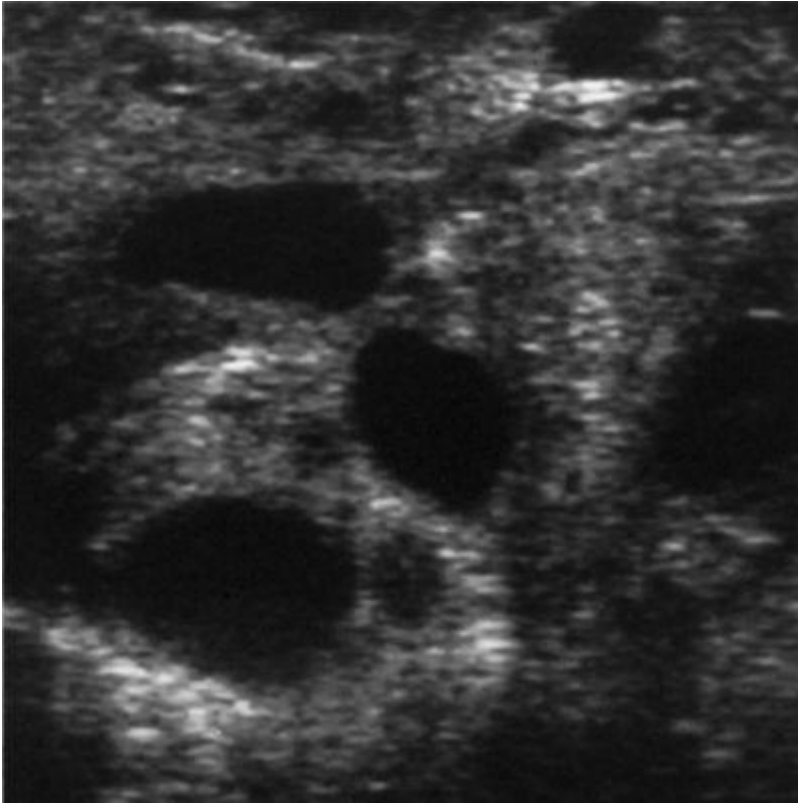
Cohen P, Pappo IP, Pappo O et al. Phyllodes tumor of the breast Pathological and Surgical Implications. Breast Dis 1994; 7: 263 - 271.

Cosmacini P, Zurrida S, Veronesi P et al. Phyllodes tumor of the breast: mammographic experience in 99 cases. Eur J of Radiol 1992; 15: 11-14. (PMID: [1327792](#))

Sebastien C, Goumot PA, Arkwright S et al. Tumeurs phyllodes, revue de 15 cas. J Le Sein 1994; 4: 226-235.

Figure 1

a



Description: Ultrasonography shows multiple solids, hyperechoic nodules with central cystic components. **Origin:**

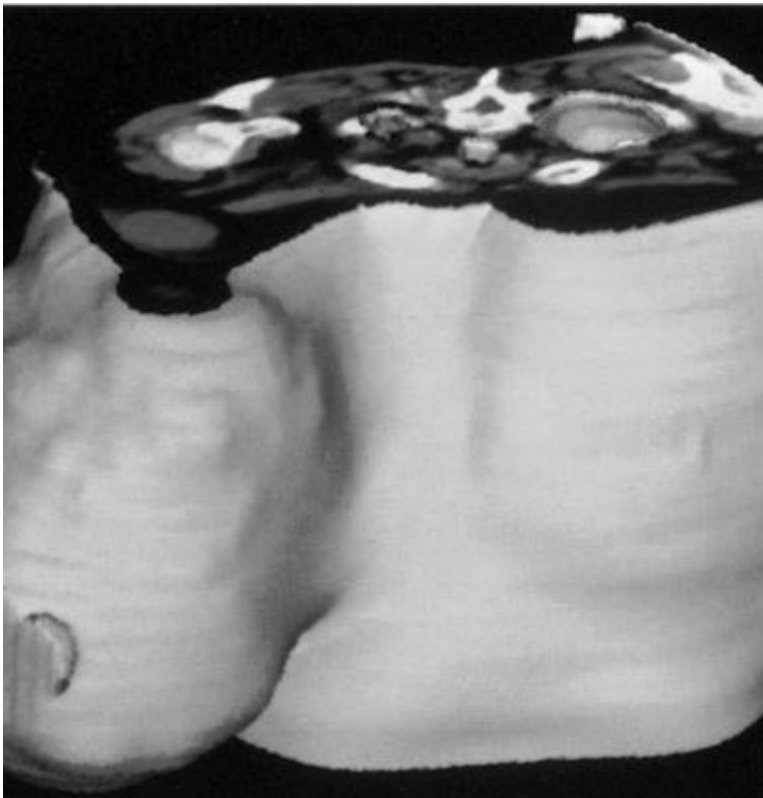
Figure 2

a



Description: Contrast-enhanced CT scan shows a well-circumscribed tumor without obvious enhancement. **Origin:**

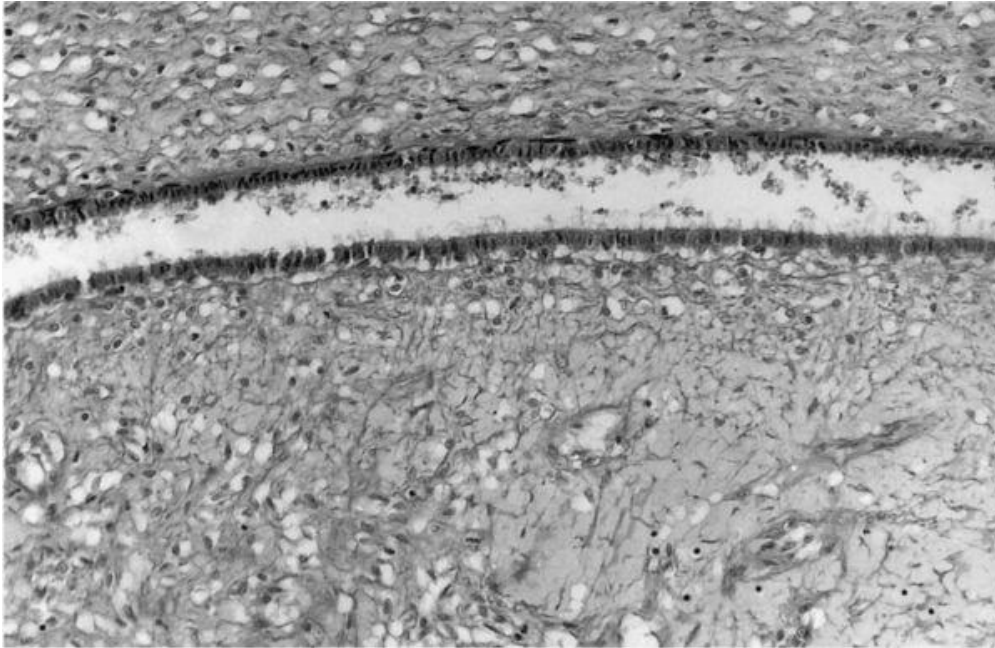
b



Description: Shows the 3-D reconstruction aspect. **Origin:**

Figure 3

a



Description: Histology shows single-cell lined epithelial component, discontinuous lining of myoepithelial cell and marked cellularity of the stroma with absence of cell atypia (H-E stain, X30).

Origin: