

# Carcinoma within a breast hamartoma

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## Abstract

Breast hamartoma is an uncommon pathological entity. It is exceedingly rare to find ductal carcinoma in situ or invasive carcinoma within a breast hamartoma. We report one such case treated at our unit.

## Keywords

Hamartoma; ductal carcinoma in situ; invasive carcinoma.

## Case report

A 48-year-old woman presented with a large, clinically suspicious right breast lump, which had enlarged over a few weeks and had been present for 3–4 months. Radiology suggested and histology confirmed the right breast lump to be invasive ductal carcinoma. She also reported an incidental left breast lump at about 11 o'clock to the nipple which had slightly grown in size. The left breast lump had been there for about 13 years and had been biopsied previously at another hospital with a benign histology result according to the patient.

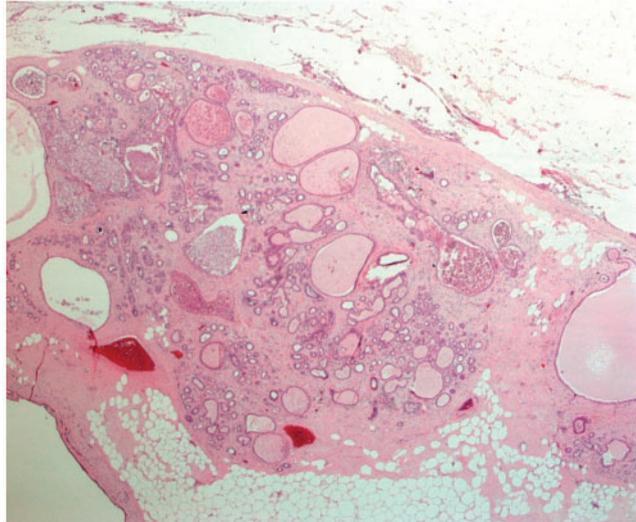
The family history revealed that a maternal aunt was diagnosed with breast cancer at the age of 60 years.

Imaging suggested and histology confirmed that the left breast lump contained a high-grade ductal carcinoma in situ (DCIS) on a further guided core biopsy.

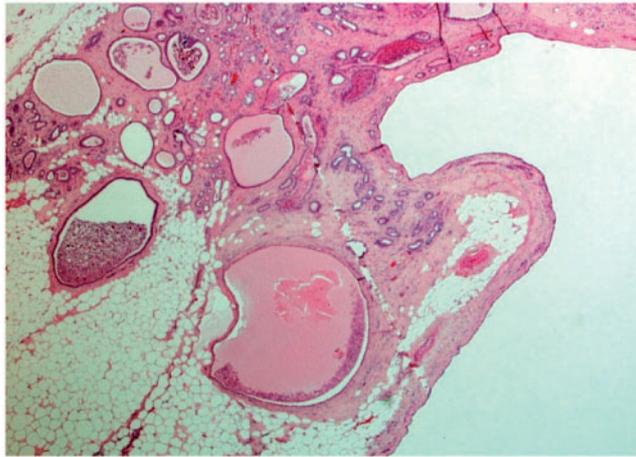
After reviewing the case in a multi-disciplinary meeting and a subsequent detailed discussion with the patient and her family, the patient chose to have a right mastectomy with axillary staging and also agreed to a wide local excision of the left breast DCIS.

## Pathology

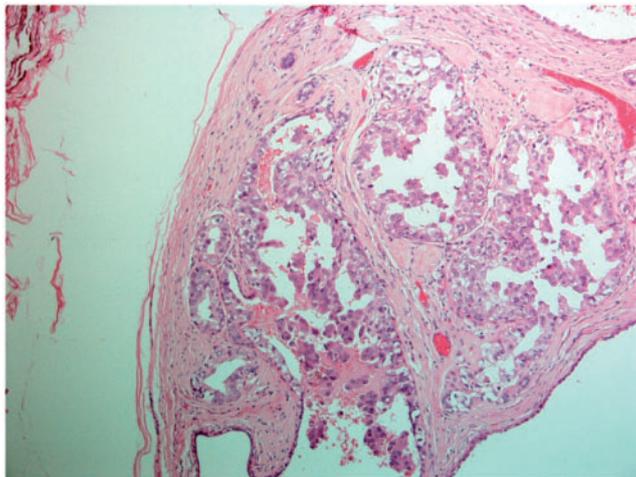
The left breast specimen radiograph showed a well-defined mass with standard marker clips. Macroscopically there was a well-circumscribed mass 29 mm in diameter. Microscopically there was a non-encapsulated lesion with a combination of stroma and cells in the terminal duct lobular units and there was superimposed sclerosing adenosis indicative of a hamartoma. (Figs. 1 and 2). Within some ducts there was proliferation of highly atypical epithelium with a cribriform, solid and micropapillary pattern indicative of a high-grade DCIS (Figs. 3 and 4). There was also an



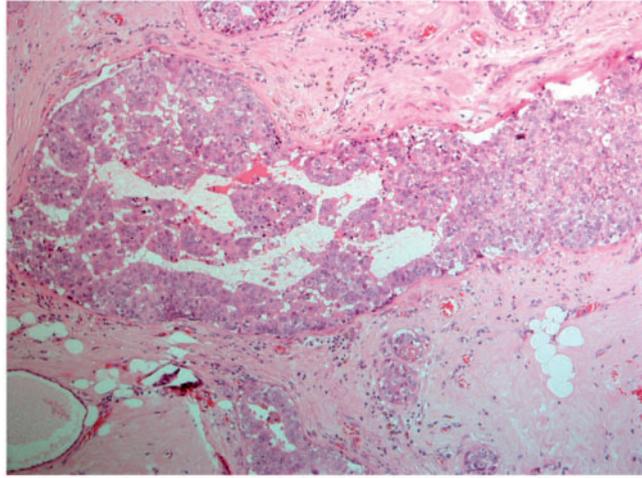
**Fig. 1.** Well-defined non-encapsulated lesion composed of connective tissue stroma and lobular structures with dilated ducts. Haematoxylin-eosin  $\times 50$ .



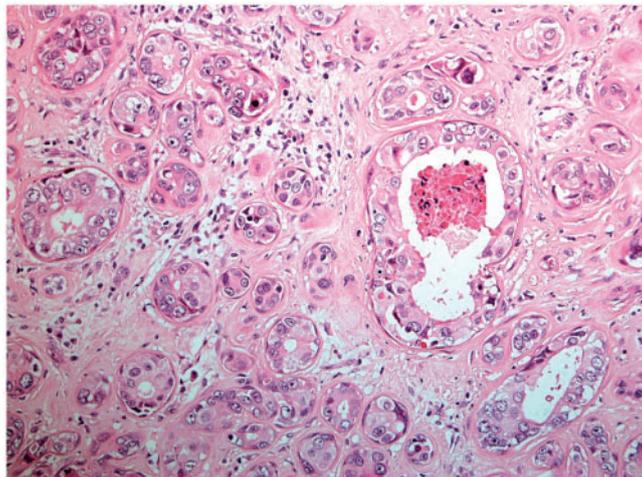
**Fig. 2.** Well-defined non-encapsulated lesion composed of connective tissue stroma and lobular structures with dilated ducts. Haematoxylin-eosin  $\times 100$ .



**Fig. 3.** Expanded ducts with proliferation of highly atypical epithelium with micropapillary pattern. Haematoxylin-eosin  $\times 200$ .



**Fig. 4.** Expanded ducts with proliferation of highly atypical epithelium with solid and micropapillary pattern. Haematoxylin-eosin  $\times 200$ .



**Fig. 5.** Foci of invasive NST adenocarcinoma. Haematoxylin-eosin  $\times 400$ .

invasive carcinoma with micropapillary, mucinous and non-specific types (NST) of architecture (Fig. 5). The whole tumour measured  $27 \times 15$  mm. The invasive tumour was multifocal, but the largest focus measured 4 mm. There was no vascular invasion. The estrogen receptor (ER) quick score was 7/8.

## Discussion

DCIS and invasive carcinoma within a hamartoma is exceedingly rare. An extensive review of the literature found only 13 cases of DCIS or invasive carcinoma within a hamartoma.

## Teaching point

The lesson from this case is to continue to pursue a benign hamartoma with micro-calcification to avoid missing unexpected sinister pathology.

## Acknowledgements

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