LYMPHADENOPATHY IN BREAST CLINIC

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A 46 year old woman presented to breast clinic complaining of generalised lumpiness of the left breast. The patient was otherwise fit and well with no significant personal or familial medical history. On examination there was nodularity in the upper quadrant of the left breast but no significant abnormality, a lymph node was palpable in the left axilla.

Figure 1
1) What investigations would you request to complete assessment of the above presenting complaint?

A mammogram of the left breast revealed extensive microcalcification and distortion in the left upper outer quadrant (see Figure 1).

USS identified multiple foci of tumour and was used to guide core biopsy. USS of the axilla revealed several involved nodes.

Core biopsies revealed a grade II invasive ductal carcinoma.

At this time the patient returned to clinic complaining of new groin lymphadenopathy. Subsequently, a groin lymph node biopsy was performed.

**Figure 2**

2) What would your differential diagnoses be for new groin lymphadenopathy in this patient?

CT imaging was consequently expedited and revealed widespread lymphadenopathy characteristic of a lympho-proliferative disorder rather than metastatic breast carcinoma. Histological examination confirmed follicular lymphoma, a synchronous diagnosis.

The patient was referred to the haematology team for shared care. Preliminary chemotherapy for follicular lymphoma commenced.

Mastectomy and axillary clearance was arranged. Histology confirmed ductal carcinoma in the breast and the axillary nodes contained both
metastatic ductal carcinoma and follicular lymphoma (see Figure 2). Following surgery chemotherapy to cover both malignancies was initiated.

Figure 3

3) Figure 2 and 3 are histological slides of excised axillary nodes in this case. Which numbered label on Figure 2 corresponds to tissue characteristic of: a) follicular lymphoma b) carcinoma? What are the core histological features which characterise a) follicular lymphoma b) carcinoma?

The patient’s final diagnosis was IDC with Stage 4 follicular lymphoma.

This case demonstrates that palpable axillary lymphadenopathy in a woman presenting with a breast lump does not always represent metastatic disease: physicians should always consider alternative differentials including synchronous malignancy.

ANSWERS

Question 1:
Imaging: Mammography and/or USS
Biopsy: Fine needle aspirate or core biopsy

Question 2:
Malignant infiltration: metastatic
Malignant infiltration: haematological
Reactive lymphadenopathy secondary to infection
Non infective reactive lymphadenopathy(1)

Question 3:
1: Follicular lymphoma
2: Carcinoma

Follicular lymphoma is histologically characterised by presence of uniform monotonous follicles. These follicles lack features of reactive follicles therefore mantle zones, germinal centres and tingible body macrophages are not present. Figure 3 provides a clear representation of the histological features described above.

Carcinoma histologically resembles the parent epithelium. Carcinomatous characteristics also include: abundant cytoplasm and nuclei with nucleoli.(2,3)

REFERENCES