O-35. WHEN IS A BREAST LUMP A LUMP? HOW GOOD ARE GENERAL PRACTITIONERS (GP) IN THEIR DIAGNOSIS, AND HOW GOOD ARE BREAST SURGEONS?

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350 patients with breast lumps diagnosed by their GP were referred to the breast unit in a 3 month period. Ultrasound was organised prospectively with mammography and specialist clinical examination as part of triple assessment to determine whether a lump was present, and whether benign or malignant.

Lump present?	Sensitivity	Specificity
General Practitioner Clinical Examination	78%	40%
Breast Surgeon Clinical Examination	82%	78%
Mammography	63%	100%

Both GP and Breast Surgeon clinical examination were more sensitive than mammography in determining if a lump was present. GP's had a low positive predictive value (43%), but their sensitivity was similar to that of breast surgeons. Their specificity however, was significantly lower ($p < 0.01$) than breast surgeons.

Benign or Malignant?	Sensitivity	Specificity
Ultrasound	97%	100%
Mammography	65%	100%

Ultrasound was the best single commonly available, non-invasive test, for the differentiation of benign from malignant breast lumps.

O-36. SYMPTOMATIC BREAST CANCER PATIENTS IN THE UK RARELY PRESENT WITH TUMOURS 1 CM OR LESS: THE IMPLICATIONS FOR MEDICO-LEGAL CLAIMS OF DELAY IN DIAGNOSIS

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Introduction: One of the senior authors has recently been involved as an expert witness defending a surgeon against an allegation of missing a breast cancer. The claimant's experts stated that by missing a 1 cm breast cancer there was a failure of duty of care.

Methods: From 1990 to 1999 data was collected prospectively from all patients referred to the Royal Bolton Hospital Breast Unit. The data base was searched to determine the number of patients with symptomatic breast cancer and the pathological size of tumours presenting over this period. Only patients referred symptomatically by their General Practitioner were included in the study.

Results: Of the 774 symptomatic patients diagnosed with breast cancer only 54 (7%) patients had tumours of 1 cm or less. There were 165 (20%) patients whose breast cancers measured from 1.1 to 1.5 cm in diameter.

Discussion: In UK symptomatic breast practice patients rarely present with tumours 1 cm or less in diameter as measured by the pathologist. Thus, providing the examining surgeon performs an adequate clinical examination then it would be unusual for a discrete lesion of this size to be identified in the outpatient clinic. Future claimants and their lawyers would do well to consider the likely size of the missed cancer at the time of any alleged breach of duty. On the balance of probabilities tumours of 1 cm or less form a low proportion of cancers diagnosed in a UK symptomatic breast practice.

O-37. ROLE OF ULTRASOUND SCAN IN WOMEN COMPLAINING OF A BREAST LUMP BUT WITH NORMAL CLINICAL EXAMINATION

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We investigated the contribution of Ultrasound Scan (USS) to the assessment of women complaining of a breast lump with normal clinical examination.

All women complaining of a breast lump, and in whom the examining surgeon could not detect it, were submitted for USS if they could locate the lump with one finger. If a solid mass was found on USS, a guided core-biopsy was performed. 275 women were prospectively studied in this way between July 1999 and November 2000.

232 women (85%), mean age = 37.2 (range: 14–69), had no abnormality on USS and were discharged. To date none of these women have re-presented to the Breast Unit with a solid lump.

Of 43 women with positive findings on USS (15%), mean age = 43.3 (range: 22–66), 29 were cysts and 14 were solid lumps. 12 of the solid lumps were benign on final histology. The 2 cancers found measured 6 and 7 mm.

In women complaining of a breast lump and able to locate it accurately, yet with normal clinical examination, USS detected cancer in 0.7% of cases.

Clinical examination of women complaining of a breast lump is very accurate and paramount. USS should be the standard back-up investigation in such cases.

O-38. RELIABILITY OF STEREO-TACTIC CORE BIOPSY DIAGNOSED DUCTAL CARCINOMA IN-SITU (DCIS) FOR SCREEN DETECTED MICROCALFICATION

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The study aimed to determine the frequency of invasive cancer (IC) in the operative specimen after stereo-tactic core biopsy

(CB) diagnosed DCIS and to assess whether any factors in the CB can predict invasion. Data for 160 consecutive women with DCIS diagnosed by stereo-tactic CB was reviewed. All patients presented with micro-calcification on screening mammography between 1998 and 2000.

The DCIS on CB was of high grade in 77%, with 80% showing comedo necrosis. Micro-invasion (<2 mm focus of IC) was present in 7%. In the operative specimen, IC was found in 33% of cases, with 60% having DCIS only and a further 7% DCIS with micro-invasion. There was no correlation ($p = 0.24$) between core DCIS grade and invasive grade. At first surgical procedure 22% of patients underwent axillary staging, most en-bloc with mastectomy (17%). Mammographic size (median 8.5 mm) correlated significantly with operative DCIS tumour size (median 20.0 mm, $p < 0.01$), but not with operative invasive component size when present ($p = 0.86$). A cohort of 36% of patients required a second surgical procedure. This was indicated for axillary staging alone in 16% and for incomplete excision or close margins in 84%. There was no correlation between the risk of occult IC being present with patient age, mammographic lesion size, CB histological DCIS type, nuclear grade or the presence of comedo necrosis.

Patients diagnosed with DCIS on CB for mammographic micro-calcification should be informed of the 33% risk of occult IC being present and of the 1 in 3 probability that a second surgical procedure will be required (re-excision 34%, mastectomy ± axillary staging 50%, and axillary staging alone 16%).

O-39. INVASIVE CARCINOMAS IN CASES JUDGED TO BE DUCTAL CARCINOMA IN SITU AT TRIPLE ASSESSMENT

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The investigation of a breast abnormality involves triple assessment – clinical examination, imaging, cytology or core biopsy. The aim of this study was to discover the percentage of patients who, at triple assessment (including core biopsy) in which all three modalities indicated DCIS only, actually had an invasive focus on surgical excision.

140 patients had a core biopsy and diagnosis of DCIS without invasion. In 96 of these triple assessment indicated DCIS only (no suspicious clinical signs; imaging showing no lump on ultrasound nor suspicious mass lesion on mammography; core biopsy DCIS only). Of these 46 (48%) had an invasive focus present at surgical excision.

The estimate that DCIS only is present is no better than tossing a coin. Lymph node sampling is advised for all such cases to avoid a second operation in those with invasive disease.

O-40. INVASIVE LOBULAR CARCINOMA: IS IT STILL DIFFICULT TO DIAGNOSE?

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150 patients with a diagnosis of invasive lobular carcinoma (ILC) and 150 patients with a diagnosis of invasive ductal carcinoma (IDC) of no special type diagnosed during the same time period have been compared. Mean ages were similar 59.6 yr IDC vs 59.7 yr ILC. 29% of IDC and 32% of ILC were screen-detected. There were significant differences in mammogram reports. 92.5% of IDC were R4 or R5 vs 76.6% of ILC, $p < 0.0004$. Only 56 IDC and 57 ILC had ultrasound and there were no differences in sensitivity, 91% of IDC and 86% of ILC being U4 or U5. There were differences in FNA categories with 94% of IDC being C4 or C5 vs 72% of ILC, $p < 0.0001$. Core biopsies performed in 49 and 69 patients respectively had similar sensitivities, 90% of IDC and 94% ILC being B4 or B5. T3 (path size) tumours were only identified in the ILC group 17 vs 0, $p < 0.0001$. 96 vs 85 patients for IDC and ILC were node negative (NS).

Delay in diagnosis was more common in ILC patients. 87% of IDC were diagnosed on the day of the clinic and 95% within 6 days vs 55% and 77% for ILC, both $p = 0.02$. Delays over 21 days were seen in 4/150 patients with IDC but in 12/150 patients with ILC, $p = 0.07$. Only 2 patients in the whole group of 300 (both had ILC) had a delay in diagnosis of over 3 months.

This study confirms that even in current practice ILC remains difficult to diagnose. The increasing use of ultrasound and core biopsy to evaluate breast masses should limit delays in diagnosis currently being seen in patients with ILC.

O-41. LYMPHOEDEMA RATE FOLLOWING TREATMENT FOR PRIMARY BREAST CANCER

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There has recently been considerable interest in the need for specialist lymphoedema nurses to be appointed. However, we had noticed in our cancer follow-up clinics that the incidence of lymphoedema appeared to be very low.

Treatment for primary breast cancer (>5 cm) has been surgery and low axillary sampling (ANS). Radiotherapy (RT) or axillary clearance (but not both) is subsequently performed in patients found to be node positive.

The patients are followed-up in the primary breast cancer (PBC) clinic weekly. Follow-up is initially at 3-month intervals up to 2 years and then 1 yearly indefinitely.

Doctors and nurses examining women at routine follow-up in the PBC clinic recorded any complaints of arm swelling or the finding of clinically recognizable swelling, over a 3-month period (19.4.00–26.7.00).

This procedure should reveal all cases of oestrogenic oedema but not oedema due to regional recurrence, who will be attending the advanced clinic.