focal uptake on the Anger camera image. The remaining cases yielded concordant results.

Conclusion: The SPEM prototype presented in this study allows better resolution than 99mTc-MIBI mammoscintigraphy in a clinical setting at a fraction of the cost of conventional Anger cameras or of solid state prototype nuclear mammographs.

332 POSTER

(^{111}Indium-DTPA-D-Phe) octreotide scintigraphy in the diagnostic assessment of palpable breast lumps

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Purpose: (^{111}Indium-DTPA-D-Phe) octreotide scintigraphy has been used in the staging of breast cancer. The purpose of this study was to evaluate its role in the diagnostic assessment of palpable breast lumps.

Methods: Forty patients with breast lumps underwent clinical examination, breast imaging and FNA cytology. All patients had (^{111}Indium-DTPA-D-Phe) octreotide scintigraphy prior to excision or core biopsy. Patients with invasive cancers had WLE or mastectomy and axillary clearance.

Results: Thirty one lumps were benign and 9 malignant. The mean malignant tumour diameter was 2.4 (1.0) cms. Four patients with invasive cancer had nodal metastases. Eight positive octreotide scans were obtained but only 2 in patients with breast cancer. The sensitivity, specificity and positive predictive value of octreotide scintigraphy in the detection of breast cancer was 22%, 81%, 25%. The results were inferior to those of clinical assessment, radiological imaging and FNA cytology. No nodal uptake of isotope was seen. Four misleading scans were obtained with activity remote from the clinically palpable abnormality.

Conclusion: (^{111}Indium-DTPA-D-Phe) octreotide scintigraphy provides no additional diagnostic information to that already given by the triple assessment.

333 POSTER

p43 expression on lymphocytes – A marker for early breast cancer in patients with nonpalpable mammographic finding

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Purpose: Placental isoferritin (p43), a protein with immunosuppressive effects, has been detected in breast cancer on the surface of lymphocytes. In this study we evaluated the sensitivity and specificity of the expression of p43-positive lymphocytes to serve as a marker in early stage breast cancer.

Methods: 76 women with controversial, non palpable mammographic finding, who had to undergo surgical biopsy, were investigated for the presence of p43-positive lymphocytes by use of the monoclonal antibody CM-H-9 and flow cytometry.

Results: Patients with early breast cancer (n = 48) revealed significantly higher values of p43-positive cells (median 3.83%, range 0.98–19.4) compared to patients with benign lumps (n = 28, median 1.43%, range 0.17–3.7, $p < 0.0001$). At the chosen cut-off level of 2% p43-positive cells leads to a sensitivity of 91.7% and a specificity of 89.3%.

Conclusion: Thus, the determination of p43-positive lymphocytes can serve as serological diagnostic tool in patient with controversial findings by mammography.

334 POSTER

Breast metastasis as the first sign of a gastric adenocarcinoma

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21 cases of gastric carcinoma metastatic to the breast are reported. In six cases a breast mass (synchronous metastasis) was the first sign of an occult gastric cancer.

Case Report: A 62 year old patient presented with a 3 cm. × 3 cm., firm, painless, mobile mass in the upper-outer quadrant of her right breast. Mammography showed a high density nodular lesion with smooth margins and without microcalcifications. FNAC suggested a diagnosis of primary breast carcinoma.

Lumpectomy and complete axillary dissection were performed. Pathological evaluation of the surgical specimen suggested the lesion was a gastric cancer metastasis. Axillary lymph nodes were uninvolved.

The patient had had no gastric symptoms, but gastroscopy discovered a fundic gastric carcinoma. Hepatic sonography, thoracic X-ray and bone scintigraphy were normal. Total gastrectomy and esophago-jejunostomy with Roux-en-Y anastamosis were performed. A stage G3 pT3 pN1 pM1 gastric carcinoma was identified. The patient recovered uneventfully and received postoperative chemotherapy (six courses of FAM). She is alive, without recurrence at 4 yrs.

335 POSTER

Breast cancer care: Does the NHS discriminate against women living in deprived areas?

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Introduction: This study describes and compares the balance of care received by women with breast cancer living in affluent and deprived areas to assess whether different patterns of care differ may explain the known poorer survival outcomes for deprived women.

Method: Case note review of the hospital and general practice records of women who were diagnosed with breast cancer in Greater Glasgow Health Board in 1992 and 1993, and who lived in Deprivation categories (Carstairs, Index) 1, 2 (least deprived, n = 157) and 6, 7 (most deprived, n = 264) at time of diagnosis.

Results: Deprivation did not affect the pathological prognostic factors at time of presentation with primary breast cancer. However, more women from deprived areas presented with locally advanced or metastatic disease (15.4% v 6.4%, $X2 = 7.42$, $p = 0.006$). The time from GP's letter to clinic visit was shorter in women from affluent areas (affluent: median 6 days, Inter Quartile Range 1 to 14; deprived: median 7 days, 1QR 4 to 20, $Z = -2.89$, $p = 0.004$), as was time to surgery from clinic visit (affluent: median 15 days, IQR 9 to 24; deprived: median 17 days, IQR 11 to 28, $Z = -2.10$, $p = 0.036$). After diagnosis women in deprived areas consulted their GPs more frequently than women in affluent areas (consulting >12 times per year: 27.0% v 15.9% $X2 = 12.67$, $p = 0.027$). Admissions to hospital for problems not related to breast cancer were more common in those living in deprived areas ($X2 = 11.82$, $p = 0.003$).

Conclusions: In this study, women living in deprived areas were more likely to present with large, advanced cancers than women from affluent areas, to wait longer to be seen at the clinic and longer for surgery. After diagnosis, more women in deprived areas continued to consult in excess of once a month in primary care and were more frequently admitted to hospital with conditions other than breast cancer. This study emphasises the need to address the issue of deprivation in relation to the delivery of optimum care for women with breast cancer.

336 POSTER

Efficiency of cytology for breast cancer without the evidence of malignancy on imaging diagnosis

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We report the efficiency of Cytology for Breast cancer showing no evidence of the malignancy on imaging diagnosis. Mammary cytological examination was performed on 2741 patients at Kurume University Hospital from 1992 to 1997. The accuracy of cyto-diagnosis was 93.7% for negative cases and 96.0% for positive cases. In addition, of 324 cases diagnosed as class III or over, 243 were confirmed to be breast cancer histologically, seventeen (7.3%) of these 243 breast cancers, which did not exhibit mammography and ultrasonographic findings of malignancy, but in which preoperative cytological examination suggested malignancy, were examined morphologically. 17 cases had 8 papilla-tubular carcinomas, 4 mucinous carcinomas, 2 scirrhous carcinomas, 1 solid-tubular carcinomas, 1 intracystic papillary carcinoma and 1 non-invasive ductal carcinoma. Eight of 17 cases were less than 1.0 cm in size, and 8 measured 1.1–1.5 cm. Characteristically, none of mucinous carcinomas less than 1.5 cm in size showed evidence of malignancy on imaging diagnosis.