

infarction are described pictorially with the clinical presentation. Emphasis is also made on the use of contrast to highlight otherwise subtle lesions .

Relevance. The features of common visual problem presentations such hemianopia, nystagmus or neglect are essential in the anatomic search and radiologic evaluation and diagnosis . However, any given particular presentation can be due to a number of lesions along the visual pathway and this poster gives illustrative examples.

P-032 Axial FLAIR MRI imaging for reassurance in the outpatient neurology setting

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Background: Brain scans are often performed to reassure patients that headaches that no serious underlying pathological exists, despite no such recommendations from recent NICE or RCR guidelines. Many such patients are relatively young, so ALARA dose minimisation prompted local protocol review: Single sequence axial FLAIR MRI was proposed in lieu of CT for increased sensitivity yet still not having heavy resource implications.

Method: 500 'young' patients prospectively selected with "scan for reassurance" as primary indication; images correlated with clinical records.

Results: Median patient age was 37y (range 15y to 48y); commonest presenting symptoms were headache (95%) and nausea (11%). No significant lesions were detected. 1.8% had incidental findings (images will be shown on poster). Additionally, 20% overall had sinus disease which may be pertinent.

Conclusion: Single sequence FLAIR imaging can exclude serious pathologies without ionising radiation, without excessive consumption of MR resources and without raising significant diagnostic dilemmas with incidental findings. The programme continues recruiting to clarify the advantages and explore the limitations of the method.

P-033 Congenital perisylvian syndrome

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Perisylvian syndrome, also known as Opercular syndrome, can present with epilepsy, pseudobulbar features (difficulty chewing and swallowing), facial muscle paralysis, intellectual disability and delayed speech and language development. It is a neurological disorder which can be acquired due to a lesion of the anterior operculum, e.g. secondary to an infarct or, rarely, congenital. Anatomical structural abnormalities include polymicrogyria of the cerebral cortex and increased cortical thickness at the Sylvian fissure. The condition is usually diagnosed in early childhood. Brain MRI is necessary for an accurate diagnosis of congenital perisylvian syndrome, which can be either unilateral or bilateral. We present 3 cases of paediatric Perisylvian syndrome, one of which is unilateral and the other two bilateral, and discuss the MRI features peculiar to that syndrome with a hint at the genetic background.

Clinical: Breast

P-035 Breast imaging in women under 40 with symptomatic breast disease

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Introduction: Current UK guidelines recommend mammography as the first line imaging technique in symptomatic women aged over 35 years and ultrasonography in women under 35 years. However, the use of imaging in patients aged 35 to 40 varies across different centres.

Aims: To determine whether performing mammograms in patients under 40 years made a difference to their subsequent management compared to clinical assessment and ultrasound alone.

Materials and Methods: We performed a retrospective review of written and electronic records of patients under 40 who underwent both mammography and ultrasonography at Homerton University Hospital between January 2011 and July 2012.

Results: 207 patients were identified. 85 patients (41%) had normal breasts, 99 patients (47%) had radiologically benign disease. Of the 13 mammographically indeterminate lesions (6%), 1 phyllodes tumour was detected, which was indeterminate on subsequent biopsy. The remaining 12 lesions were benign. One mammographically suspicious lesion was benign on both ultrasound and biopsy. 9 cancers (4%) were diagnosed, all of which appeared either suspicious or malignant on both ultrasound and mammogram.

Discussion: We have shown that mammography did not beneficially influence clinical management compared to physical examination and ultrasonography alone. Patients with mammographically indeterminate lesions that are benign or normal on ultrasound are subjected to multiple unnecessary and possibly anxiety provoking biopsies.

Conclusion: We propose that ultrasonography is used as first line imaging in symptomatic women under 40 unless there is a strong clinical suspicion of malignancy.

P-036 Visual assessment of breast density: reproducibility

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Background and Aims: Increased breast density is a modifiable breast cancer risk factor. Visual assessment of breast density estimates the proportion of the breast area occupied by fibro-glandular tissue on a mammogram. Although practical in terms of population-based screening, this approach is subjective. We investigate the intra-observer repeatability of breast density visual assessment.

Method: Seven mammographic film readers each re-assessed the breast density of 100 normal Full Field Digital Mammogram cases that they estimated the density for at least one year previously. Density readings performed by each reader between May 2010 and May 2011 were divided into deciles and 10 readings were randomly sampled from each decile to give cases spanning a range of densities. On both occasions cases were reviewed in similar reading conditions and density was recorded on the same percentage Visual Analogue Scale (VAS).

Results: For 6 out of the 7 readers, the difference in mean density between the 2 sets of readings was less than 6%, but the largest difference was 14.7%. Bland-Altman plots produced for each reader to assess agreement between old and new VAS readings showed considerable variability. At best, the limits of agreement were -12.46% to +17.02% and at worst they were -14.50% to +40.98%. The maximum discrepancies between old and new readings ranged from -31% to +65%, with a majority positive trend.

Conclusion: We conclude that variability between old and new readings was clinically unacceptable, hence there is a need for evaluation of reader performance when using visual assessment.

P-037 Visual assessment of breast density: are four images and two readers necessary?

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Objective: Visual assessment of breast density provides a simple method of assessing this important component of breast cancer risk, but when used in routine screening the workload is significant. Here we investigate whether assessment of just one radiographic projection provides a representative estimate of breast density.

Methods: Digital mammograms from 6485 women were assessed independently by two readers as part of a large study aiming to predict cancer risk at the time of screening, and densities in all four views were marked on 10cm visual analogue scales. Differences in density recorded for different views by the different readers were analysed.

Results: The average discrepancy between left and right breast densities was 0.26%, (s.d. 2.53%; 95% confidence interval -4.81% to +5.32%). Between CC and MLO views, the average difference was 0.73% (s.d. 2.99%; 95% confidence interval -5.26% to +6.71%). The average difference in estimates by the two readers was -0.05% (s.d. 12.04%; 95% confidence interval -24.13% to +24.04%).

Conclusion: Clinically significant differences were not found between left and right or CC and MLO images, demonstrating that the number of views assessed could be decreased. However the large discrepancies between the readers indicate that this method of measuring percentage breast density is not reliable. This article presents independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research

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P-038 Is there a link between mammographic density and breast cancer characteristics?

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Aims: The aim of this work was to examine the relationship between volumetric breast density and tumour characteristics, such as size and level of invasiveness, in breast cancer cases.

Methods: This study involved retrospective data collection on 106 women who were diagnosed with breast cancer during their routine screening mammogram. The volumetric density measurement for each breast with cancer was calculated by Quanta™ and Volpara™ software based on the raw FFDM (full field digital mammography) images. Histological information regarding tumour size and the level of invasiveness was extracted from the NBSS (national breast screening system) database. The associations between mammographic density and tumour characteristics were examined using the Mann-Whitney U test and Spearman's rank order correlation.

Results: Of the 111 lesions, invasive cancers had a significantly higher mean Volpara™ volumetric density than non invasive ones ($p = 0.046$). Similar results were replicated in the Quanta™ measurements, however the results were not statistically significant ($p = 0.189$). Further analysis showed no significant correlation between tumour size and volumetric density.

Conclusion: In women with previous negative screening mammograms, an association was found between a measure of volumetric breast density and the level of invasiveness at the time of cancer detection.

P-039 CT staging in breast cancer: can we select patients requiring staging with CT?

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Background: One-in-nine women in the UK will develop breast cancer. Estimates suggest 5% of women presenting with breast cancer will have metastases at the time of diagnosis and 35% will develop metastases within 10-years of diagnosis. At present, no firm guidelines indicate which patients should undergo staging CT.

Aims: Which patients are most likely to have metastases and what characteristics determine whether to CT stage?

Methods: Data regarding patient and tumour characteristics was retrospectively collected from Equest and CRIS databases on patients who had a CT staging investigation at Southampton Breast Screening Unit during a 4-year period.

Results: 114 patients were eligible for analysis. 21 had distant visceral metastases confirmed by CT. Statistically significant ($p \leq 0.05$) relationships were found with axillary lymph node involvement on ultrasound and biopsy results of tumour size (pT) (OR 2.078, 95% CI 1.166-3.704), mammographic size (OR 1.04, 95% CI 1.011-1.069), pre-CT stage (OR 18.831, 95% CI 2.391-148.287) with the existence of metastases on staging CT.

The most common reason for CT staging was axillary lymph node involvement on ultrasound with 56.5% with metastases being staged for this reason. Incidence of metastases increased from 3.64% in early stage disease to 13.33% in late stage disease.

Conclusion: CT is a highly effective staging investigation; however, involves exposure to ionising radiation and financial costs. These results indicate staging CT may not be required in all cases and could be restricted to those patients most at risk from metastases.

P-040 Clinical usefulness of axilla ultrasound in patients without breast cancer

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Aim: To assess the yield from axilla ultrasound in patients with normal breast imaging and in patients without a breast lesion

Methods: We retrospectively studied the records of all patients undergoing axilla ultrasound during January 2012 – March 2012. Patients with an ultrasound score of U1 – U3 were included in the study. Patients with breast cancer and those with an ultrasound score of U4 and U5 were excluded from the study.

Results: In our study population, none of the patients with an ultrasound score of U1 – U3 had a significant pathology.

Conclusion: Ultrasound imaging has a high specificity when evaluating axillary lymph nodes in patients with breast lesions. However, Our study shows that performing ultrasound of axilla in patients with normal breast imaging and in patients presenting with other benign pathology is not beneficial.

P-041 The clinical role of FDG-PET/CT in follow up and restaging of breast cancer patients

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Purpose: The purpose of the current study was to evaluate the clinical role of FDG-PET/CT in the follow up and restaging breast cancer patients.

Methods: We retrospectively evaluated 34 female patients with history of breast cancer. Patients were referred for a FDG-PET/CT scan because of suspected recurrence (n=15), whole body staging in already confirmed cases of recurrence (n=5), follow up and reassurance in asymptomatic patients (n=7), follow up after local ablative therapy of hepatic metastases (n=5), follow up after treatment of bone metastases (n=2). PET-CT findings were compared with the findings obtained by other imaging modalities, histopathology whenever available, and clinical and imaging follow up for at least 6 months.

Results: The PET/CT was considered pathological in 21 out 34 patients. Incorrect interpretations of PET/CT images occurred in 3 patients (8.8%) (1 false positive and 2 false negative). Reasons for false positive was pulmonary nodule (n=1). Whereas false negative was due to an axillary lymph node metastasis (n=1) and supra renal metastases (n=1). PET/CT showed an overall diagnostic accuracy of 91.2% with a sensitivity of 90.9% and a specificity of 91.6%. The PPV and NPV were 95.2 % and 84.6% respectively.

Conclusions: FDG-PET/CT may play a substantial role in the restaging and follow up of patients with breast cancer with significant sensitivity and specificity.

P-042 Can radiographers make accurate decisions about cancer when interpreting mammograms? A systematic review

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Radiographer involvement in mammography image interpretation is well established in the National Health Service breast screening programme. Some radiographers now undertake this role in symptomatic services. The purpose of this review was to evaluate the evidence underpinning radiographer involvement in mammography image interpretation.

Aim: To determine if radiographers make accurate diagnostic decisions when interpreting mammograms.

Method: A comprehensive search identified 8374 potentially relevant papers; 13 met the review inclusion criteria - evaluating cancer detection accuracy using mammograms from authentic screening or symptomatic populations. Sensitivity, specificity, positive and negative predicative values and overall accuracy were compared within and across studies.

Findings: Diagnostic accuracy varied between 66.5% and 99.7%. The studies were not suitable for meta-analysis in view of participant and methodological variability.

Ten studies used screening mammograms - radiographers made more accurate decisions if they had undergone some image interpretation training and when their performance was measured over a test bank of purposively selected cases.

Mammography radiographers with no image interpretation training showed greater accuracy when tested over a consecutive series of cases as might occur in real-life practice.

Only three studies measured performance using mammograms which included some symptomatic cases. Whilst overall accuracy (81.8 - 88.1%) was not as high as in some screening studies, ability to correctly identify cancer (sensitivity) was better (89.0 - 91.4%).

Conclusion: Image interpretation specific training improves the ability of radiographers to make accurate diagnostic decisions about screening mammograms. There is a need for further study of evolving practice using real-life populations of symptomatic cases.

P-043 The impact of false positive screening mammography on subsequent breast screening participation

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Background: When potential abnormality is found on screening mammograms, patients are invited to an assessment clinic. The outcome of the assessment clinic results in the diagnosis of false positives and true positives. Publications have suggested that false positive mammography reduces the subsequent uptake of screening, whilst other authors have found it to have no effect. We assess the effects of false positive screening results at our centre. **Methods:** Six months of assessment clinics were reviewed. Patients with a false positive diagnosis following assessment clinic appointments were tracked to determine if they accepted a subsequent breast screening invite 3 years later.

Findings: 208 patients attended assessment clinic. 45 patients (22%) had malignant disease. 2 (0.5%) were placed on early recall. 161 patients (77.5%) had non-malignant disease and categorised for a routine recall.

Of the false positive group, 18 patients were no longer suitable for routine screening. 143 patients were invited for screening, of these 122 or 84.7% accepted the invite. 19 patients or 13% of those eligible for screening did not partake in their subsequent screening round.

We compared the screening invite uptake for the false positive group with women screened in the same year having had a normal result (84.7% versus 87.7%). No significant difference is demonstrated between the two groups.

Conclusion: A false positive result at screening had no effect on subsequent screening participation. In addition, patients with a false positive screening result were statistically more likely to attend subsequent screening than the general screening population

P-044 Radiographer image interpretation and reporting in screening and symptomatic mammography: a survey of current UK practice

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Radiographer performed mammography image interpretation and reporting (MIIR) was introduced to address medical workforce shortages and has improved the performance of the NHS breast screening programme. This survey explored the characteristics and practices of radiographers undertaking MIIR in breast imaging services in the United Kingdom.

Aim: To describe the professional attributes, training and practices of radiographers involved in MIIR in the UK.

Method

Information about the study was sent to all breast imaging screening and symptomatic services in the UK inviting MIIR radiographers to participate in an online survey during April and May 2012.

Findings: Sixty-six radiographers completed the survey. Respondents worked in combined NHS screening / symptomatic units (33), screening services (17), symptomatic units (15) and private practice (1). Most respondents (71%) were over 46 years of age, qualified with the Diploma of the College of Radiographers (79%), undertook the

Society of Radiographers Certificate of Competence in mammography (68%) and have a university post-graduate award (61%) including MIIR modules.

MIIR is usually undertaken in specifically allocated sessions; average monthly workload is 9 sessions (600 examinations) for screen reading and 7.6 sessions (85 cases) for symptomatic work. Within the sample radiographers interpreted and reported the full range of mammography investigations. A variety of practices (single / double reading, hot / cold reporting, official / informal opinion) was evident.

Conclusion: Radiographers in the UK now undertake MIIR across a full range of examinations. Further research is required to explore why operational practices vary and what impact this has on service quality.

P-045 Does increasing compression improve visual image quality in mammography? An initial investigation

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Purpose: Literature suggests that visual image quality (VIQ) and compression levels are directly related. This study investigates the relationship between VIQ and compression.

Methods: Over 3 consecutive NHSBSP screening rounds, 39 clients were identified from a sample of 500. The 39 clients had received markedly different amounts of compression on each consecutive screen with no measured breast density changes.

The 39 clients fell into one of three compression groups; low (mean CC=6daN, MLO=7.2daN), intermediate (mean CC=8.4daN, MLO= 9.6daN) and high (mean CC=11.9daN, MLO=13.6daN). Significant differences in compression values between each compression group were found [T-Tests (<0.01) and ANOVA (<0.01)]. An individual client experiencing a maximum compression variation of 12daN in the MLO views and 11daN in the CC views between 3 screens.

Left and Right medio-lateral oblique and Left and Right cranio-caudal views were scored for VIQ using 3 Image Quality Scales (IQS1, IQS2 and IQS3) for each of the 39 clients on each of their 3 screening rounds.

Results: For the same client no significant difference was found in visual image quality over the 3 screening rounds. This finding was found for each VIQ scale (Kappa >0.87, ANOVA p>0.5, ICC >0.91).

Conclusion: Our study suggests that an increase in compression is not necessarily associated with an increase in visual image quality. This is contrary to popular views. We suggest that further work be conducted to clarify the potential relationship between visual image quality and compression.

P-046 An analysis of the compressed breast area and image receptor/compression paddle pressure balance in different mammographic projections

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Aim: Determine whether: Medio -Lateral Oblique (MLO) 45° or (MLO) 55° gives increased image receptor (IR) foot print; IR at intra-mammary fold (IMF) or IR at +2cm relative to IMF gives increased IR foot print and better pressure balance for Cranio-Caudal (CC).

Method: A digital mammography set with flexible paddle was used on 16 female volunteers. The pressure exerted from the paddle and IR and the area of breast in contact with the IR were measured using an electronic pressure mat. Readings were taken from each breast using four different techniques. The CC was positioned with the IR at the IMF and 2cm above the IMF. The MLO was positioned with the IR at 45° and 55°. Five frames of pressure / area data were recorded per compression and 2D and 3D pressure maps produced. The results were analysed mathematically and visually.

Results: Initial analysis indicates that in all cases, for CC, raising IR 2cm vertically relative to the IMF significantly increases the area of breast in contact with the IR. Analysis of the MLO projections demonstrated no significant

difference between 45° and 55°. The pressure maps demonstrate focal areas of high pressure within the breast in some women.

Conclusion: For the CC view, raising the IR 2cm vertically from IMF increases breast area on the IR. This makes 'object' closer to the IR, consequently this may enhance image quality. Further studies are planned to correlate pressure and compressed breast area with mammographic image quality, breast density and pain.

P-047 Axillary abnormalities on breast imaging

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Learning objectives: To highlight the spectrum of axillary abnormalities detectable during breast imaging. To illustrate the imaging findings of axillary abnormalities on mammography, ultrasound, digital breast tomosynthesis and breast MRI.

Background: The axilla is visualised to varying degrees on standard mammographic views, digital breast tomosynthesis, ultrasound and breast MRI. Patients with axillary abnormalities may present symptomatically to the breast clinic, or be detected incidentally during breast screening.

Imaging findings: Axillary lesions detectable on conventional breast imaging modalities include abnormalities of the skin, subcutaneous tissues, lymph nodes, accessory and axillary tail breast tissue and shoulder joint, as well as artefactual lesions.

We present a range of axillary conditions seen in our breast unit, and illustrate their imaging findings on mammography, ultrasound, digital breast tomosynthesis and MRI.

Conclusion: Familiarity with the imaging findings of axillary abnormalities that may present to symptomatic breast clinics or incidentally during breast screening, is important to facilitate accurate differential diagnosis.

P-048 Pictorial review of PIP implant ruptures

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Aims: To illustrate the imaging appearances of PIP(Polyimplant prosthesis) implant rupture on different imaging modalities including mammography, ultrasound and MRI and to highlight subtle findings which can easily be misinterpreted.

Content: PIP implants are different to other types of silicone implants not only for the industrial grade silicone used in them but more importantly for a thinner implant shell/capsule which is thought to be the reason for a higher rate of rupture. For a radiologist this poses a particular problem as this thin capsule is often difficult to identify on imaging thus leading to misinterpretation of intra vs extra capsular rupture or complete missed diagnosis of a rupture. An underdiagnosis or overdiagnosis would have an impact on the patient treatment. Given the various factors involved such as high level of patient anxiety and the costs around removing/replacing an incorrect diagnosis could potentially become litigious. Since December 2011, 144 women were imaged at our institution with a clinical suspicion of implant rupture. This review will help not only in identifying the imaging features particularly relating to PIP implant rupture/complications but also the features useful to avoid a misdiagnosis.

Conclusion: For everyone involved in imaging breast implants, it is essential to be able to identify an abnormal PIP implant correctly and hopefully avoid any pitfalls.

P-049 Breast MRI: experiences from a district general hospital

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Introduction: MRI in breast disease is recommended in;

- (i) investigation of lobular neoplasia,
- (ii) assessment of implant rupture,

(iii) evaluation of tumour response to chemotherapy,

(iv) circumstances of diagnostic dilemma where it can be used as a problem solver such as where there is a discrepancy between clinical and radiological findings,

(v) screening patients with a genetic predisposition to cancer.

Increased referrals for MRI had been noted. We conducted an audit to determine whether the technique was being used appropriately.

Methods: A retrospective review of radiological and histological reports from patients undergoing breast MRI from January 2012 to October 2012 was performed.

Results: 150 patients were scanned; 46 (31%) for lobular carcinoma (9 cases were shown to have multifocal disease and in 2 this was bilateral), 36 (24%) for possible implant rupture, 52 (35%) as a problem solver, 2 (1%) patients were scanned for a strong family history, and one was scanned to monitor neo adjuvant chemotherapy. In 13 (9%) guidelines were not adhered to – the most common reason being as a substitute for a tissue biopsy.

Conclusions: In 91 % of cases scanning followed the recommend guidelines but in 13 cases these were not followed. We suggest that breast MRI in certain circumstances is a sound alternative to biopsy in selected low risk patients. We provide imaging examples.

P-050 Comparison of radiology scores with histopathology in a symptomatic breast setting

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Aim: The primary objective of our study was to compare radiological scores for breast imaging with histopathology in symptomatic breast setting. The secondary objective was to evaluate concordance between axillary ultrasound with sentinel lymph node biopsy (SLNB) results.

Method: This was a retrospective analysis of radiology and histopathology reports for 100 randomly selected patients, who attended our symptomatic breast clinics over a period of 6 months. All patients >35years had both ultrasound of the breast and mammography. Patients ≤35 years with indeterminate and suspicious lesions on ultrasound went on to have mammography. Comparison was made between histopathology and imaging scores. Axillary ultrasound findings were compared to SLNB results.

Results: 60 patients had malignant histopathology. 18(30%) malignant lesions were underscored on mammogram and 7(11.6%) on ultrasound. However, only 5(8.3%) malignant lesions were underscored on both modalities.

There was 95% concordance of radiological scores with histopathology for benign lesions.

Of the 58 patients who had axillary ultrasound, 34 were reported to be normal and underwent SLNB. 28/34 (82%) of these patients had normal SLNB results.

Conclusion: 93% of all lesions were appropriately scored on radiological imaging. 91.7% of the malignant lesions had corresponding BIRAD scores of 4 or 5. There was 82% concordance of axillary ultrasound with SLNB in excluding axillary node metastasis.

P-051 A review of macrolane injections in clinical breast imaging

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Macrolane™ Injections for cosmetic breast enhancement were introduced in 2007; however have recently been withdrawn by the manufacturers due to the lack of consensus between radiologists. The appearance of Macrolane on various imaging modalities poses new challenges to practitioners and there are currently no guidelines for breast management when clients present with abnormalities post-treatment.

Although a temporary filler, studies suggest Macrolane may last longer in some patients, and the long-term effects are yet unknown.

Many complications are minor but symptomatic breast pain and lumps directly related to the substance often require investigation with imaging (mammography and ultrasound) leading to biopsy in order to diagnose, thus increasing patient anxiety.

Macrolane causes opacities, which may obscure glandular breast tissue, whilst concealing underlying pathologies on imaging. Migration of the substance into the pectoral muscle and glandular tissue can reduce the sensitivity of mammography.

Capsular contracture can lead to fibrosis and micro-calcifications may remain even after complete degradation of the substance, which may require stereo-tactic biopsy in order to differentiate from malignancies.

Ultrasound images of the breast indicate the similarities between cystic lesions, abscesses and Macrolane, whilst contrast-enhanced MRI is required for problem solving. These associated implications may directly affect patient pathway in the NHS breast screening programme, and delay diagnosis of breast cancer.

This review of clinical images obtained in mammography, ultrasound and MRI will provide knowledge and recommendations for practitioners who are beginning to encounter Macrolane for breast enhancement.

P-052 Local strategy for the accreditation and continuous professional development of assistant practitioners in breast imaging

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From January 2013 assistant practitioners who are members of the Society of radiographers will be asked to apply for accreditation. Although this is a voluntary register, the clinical activity relating to imaging or treatment performed by assistant practitioners who do not become accredited will not be recognised by the Society of Radiographers and their membership status will be identified as “support worker” or “radiography department helper”.

It is proposed that accreditation is a means of reassuring patients and employers that assistant practitioners are appropriately educated and trained, working to their scope of practice and engage in continuous professional development.

This poster aims to share experiences, ideas and information related to assistant practitioner accreditation and although the content is with particular reference to breast imaging we hope to offer an appreciation of the accreditation pathway for other modalities.

The objectives are:

- To identify routes to accreditation as documented in the Scope of Practice for assistant practitioners, with particular reference to local assistant practitioners in breast imaging.
- To illustrate practical methods for ensuring all necessary documentation is in place for accreditation.
- To suggest ways in which evidence to sustain bi-annual re accreditation may be achieved, with particular reference to service improvement and staff development.
- It is hoped that delivery of this poster will raise questions and encourage other departments to explore how they can achieve accreditation and implement a strategy for continuous professional development of assistant practitioners.

Clinical: Chest

P-053 Air spaces, percentages and time for an update: an audit and discussion into image guided lung biopsies against BTS Guidelines

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The BTS guidelines for Image Guided Lung Biopsies published in 2003, give a best standards guide to the pre-procedure protocol, sampling accuracy, post-procedure care and acceptable complication rates. This poster presents