26% diagnostic, 18% ultrasound only with no intervention, and 14% pre chest drain insertion or thoracoscopy. "X" marks the spot are now obsolete.

Conclusions Pleural ultrasound has gradually but surely become an essential component of the Respiratory specialist's remit. An inpatient pleural service enables prompt assessment and diagnosis, relief of symptoms and onward management as appropriate. With an ambulatory pleural service, patients with either known malignant pleural effusion or first presentation can be managed as elective daycase procedures without attending A&E or being admitted. Once symptoms are relieved patients are able to go home knowing how to access the Service if the fluid recurs without a crisis admission via A&E. Moreover, unnecessary invasive pleural interventions can be avoided and definitive management expedited.

Abstract P220 Figure 1.

Though requiring appropriate work planning and resources it does result in substantial qualitative and quantitative improvements in patient care. No doubt, not all pleural effusions need be aspirated under ultrasound guidance, however, this is not an exact science and not infrequently, with the aid of pleural ultrasound, an invasive pleural intervention may be avoided altogether.

P221 IMPROVED MANAGEMENT OF PLEURAL EFFUSION IN A DISTRICT GENERAL HOSPITAL

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Background Exudative pleural effusion (EPE) is a common presenting problem, associated with serious underlying pathology warranting expeditious and thorough investigation. The BTS guideline outlines a diagnostic algorithm and recommends referral of patients to chest physicians following inconclusive initial pleural fluid analysis.

We have carried out a series of audits on the management of EPE in a district general hospital (DGH). The first revealed deficiencies in the diagnostic pathway, with low diagnostic rates compared with published data. We instituted regular teaching sessions including simulated training of junior doctors, established a specialist pleural effusion clinic (SPEC) and during the same period there was increase in the number of respiratory registrars. In a previous study comparing results of the first retrospective audit cohort (RC) to the SPEC cohort showed

improved outcomes in the latter. Unfortunately a significant proportion of patients with EPE are still diagnosed on acute admission. In this audit we compare the management of these patients to the RC.

Methods We carried out a retrospective re-audit (RA), against BTS guidelines, of non-elective admissions to the general medical take from January to December 2011 with EPE. Clinical records of patients with pleural effusion were reviewed and analysed for investigations, involvement of respiratory physician, length of stay and outcome. Those with transudate effusions were excluded. This was similar to the RC which covered the period from February 2005 to June 2006. We present comparative results.

Results Of 106 patients, 66 patients had diagnostic aspiration, 18 had small effusions unable to aspirate, 19 had known diagnoses and 3 had terminal cancer. The respective results in the RA compared to the RC showed that mean age was 65 vs 68 years, 86% had all the recommended tests vs 46%, 87% had chest physician input vs 50% and diagnosis confirmed in 95% vs 58%. The median length of stay in hospital was 4 days (range 0–51) vs 12 days (range 1–55). Table 1 demonstrates pleural fluid tests performed.

Conclusions The RA shows improved investigation, access to chest physician, diagnostic rates and average length of hospital stay in patients with EPE in this DGH. The change is likely multifactorial owing to increasing awareness, training, and better specialist services.

Abstract P221 Table 1. Pleural fluid investigations

Test on pleural fluid	RC (% of samples sent)	Re-audit (% of sample sent)
Protein	91%	97%
LDH	91%	94%
pH	55%	94%
MCS/ AFB	85%	100%
Cytology	82%	95%

P222 PLEURAL TB: A COMMON CAUSE OF PLEURAL EFFUSION IN SOUTH LONDON

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Background Pleural tuberculosis (TB) is one of the most common forms of extrapulmonary TB, reported to account for up to 25% of TB infected adults, and 30% of exudative pleural effusions in developing countries. Despite this, little information has been reported on its incidence within London.

Aims and methods A retrospective observational study was performed at a London tertiary referral centre. The aim was to identify the contribution of pleural TB to the overall burden of both pleural and TB disease, and assess diagnostic yields of investigation techniques and outcomes of treatment.

Results 28 patients were diagnosed with pleural TB between Jan 1st 2010– 31st Dec 2012. This represented 6.2% of the total number of TB cases, and 4% of the total number of investigated pleural disease cases. The mean age of the patients was 33 ± 10 (range 17–62); 79% were male; 46% were Black African, 29% Asian, 21% Caucasian and 4% Black Caribbean. There was a range of symptoms at presentation, with 96% of patients complaining of at least one symptom (Figure 1).