

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 3498

**Publication Number:** P4360

**Abstract Group:** 10.1. Respiratory Infections

**Keyword 1:** Infections **Keyword 2:** Pleura **Keyword 3:** No keyword

**Title:** Current practice: Pleural fluid sampling and analysis - how well are we doing?

Mr. Patrick 21303 Bradley p.bradley.cantab@gmail.com <sup>1</sup>, Dr. Jurgen 21304 Herre jurgengerre@hotmail.com MD <sup>2</sup>, Dr. Stefan 21305 Marciniak sjm20@cam.ac.uk MD <sup>2</sup> and Dr. Pasupathy 21334 Sivasothy pasupathy.sivasothy@addenbrookes.nhs.uk MD <sup>2</sup>. <sup>1</sup> School of Clinical Medicine, University of Cambridge, Cambridge, United Kingdom and <sup>2</sup> Department of Respiratory Medicine, Addenbrooke's Hospital, Cambridge, United Kingdom .

**Body:** Background Pleural aspiration has important diagnostic and therapeutic uses. British Thoracic Society (BTS) guidelines detail evidence-based best practice for thoracocentesis and testing, but it is uncertain how closely these guidelines are followed. Aims This study evaluated adherence to best practice in a large tertiary hospital, comparing the performance of the respiratory department with the rest of the hospital. This was to assess whether there is an impetus for improving the practice of pleural aspiration and subsequent testing, in particular for patients with suspected pleural infection. Methods We retrospectively examined patient records for those who had pleural aspirations sent for microbiological testing over an eight-week period in 2012. Thirty procedures were included, following exclusion of cases with known pleural malignancy and repeat procedures. Adherence to BTS recommended practice was assessed and compared hospital-wide. Results A high proportion of pleural aspiration procedures were performed without ultrasound guidance (50%). Biochemical parameters such as albumin, total protein, pH and LDH from pleural fluid, as well as serum when appropriate, were in many cases not measured (37%, 67%, 43% and 70% respectively). Conclusions This assessment of real-world practice highlights a need for closer adherence to professional guidelines. These findings necessitate a structured training programme for both ultrasound and sample processing to both ensure patient safety and to minimise the potential morbidity associated with repeated fluid sampling.