

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 4633

**Publication Number:** P3094

**Abstract Group:** 1.4. Interventional Pulmonology

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

**Title:** A randomised controlled study comparing the outcomes of pleural nurse practitioner (NP) versus doctors trained to perform pleural procedures for management of pleural effusions

Mrs. Elaine 30379 Reid elaine.reid@addenbrookes.nhs.uk <sup>1</sup>, Dr. Sumit 30380 Chatterji Sumit.Chatterji@pbh-tr.nhs.uk MD <sup>1</sup>, Dr. Stefan 30381 Marciniak sjm20@cam.ac.uk MD <sup>1</sup> and Dr. Pasupathy 30382 Sivasothy pasupathy.sivasothy@addenbrookes.nhs.uk MD <sup>1</sup>. <sup>1</sup> Respiratory Medicine, Cambridge University Hospitals Trust, Cambridge, United Kingdom, CB23 1HB .

**Body:** Background: Following the National Patient Safety Agency alert in the UK thoracic ultrasound (TUS) is strongly recommended for all pleural procedures (PP). This places strains on clinical service delivery. We undertook a randomised control study to test the hypothesis that a NP trained to Royal College of Radiologist level 1 TUS and in performing PP independently is equivalent to doctors trained in undertaking PP. Method: In this prospective ethically approved un-blinded non-inferiority study we assessed PP as carried out by a NP (Group A) in comparison with doctors trained in PP (Group B) in 32 patients. Primary endpoints were success of the PP, procedural pain using visual analogue score (VAS), patient anxiety using short form State Trait Anxiety Index (STAI). Secondary outcome measures were complications. Non parametric statistical tests were used for analysis. Results: There was no statistically significant (NS) difference between groups as assessed by primary endpoints (Table 1). There was one failure to undertake therapeutic pleural aspiration in Group B. Delayed complications were drain dislodgement in Group A and re-expansion pulmonary oedema in Group B.

Table 1

	Group A	Group B
Pleural procedures (pleural aspiration, chest drain & IPC insertion)	17	15
Pleural procedure success (5)	100	93.75
Procedural pain median VAS score (range)	2* (0-7)	3* (0-7)
Patient STAI (range)	3.4* (1-4)	3.5* (1-4)

\*NS

**Conclusion:** We believe this is the first randomised control study to test if after appropriate training a pleural NP is able to safely and effectively undertake PP with equivalence in practice to trained doctors.