

European Respiratory Society Annual Congress 2012

Abstract Number: 4979

Publication Number: P3607

Abstract Group: 1.4. Interventional Pulmonology

Keyword 1: Lung cancer / Oncology **Keyword 2:** Neoplastic diseases **Keyword 3:** No keyword

Title: Diagnostic approach of lung malignancies through CT-guided percutaneous needle cytology and biopsy

Dr. Carla 19451 Ribeiro carlafarinharibeiro@gmail.com MD ¹, Dr. Ines 19453 Ladeira inesladeira014@gmail.com MD ¹, Dr. Ana 19465 Oliveira carlafarinharibeiro@gmail.com MD ¹, Dr. Manuela 19466 Vanzeller carlafarinharibeiro@gmail.com MD ¹, Dr. Tiago 19467 Pereira carlafarinharibeiro@gmail.com MD ² and Dr. Barbara 19468 Parente carlafarinharibeiro@gmail.com MD ¹. ¹ Pulmonology Department, Centro Hospitalar de Vila Nova de Gaia, Vila Nova de Gaia, Portugal and ² Radiology Department, Centro Hospitalar de Vila Nova de Gaia, Vila Nova de Gaia, Portugal .

Body: Background The use of CT- guided percutaneous needle procedures is well established in the diagnostic approach of suspected lung malignancy. Aim To evaluate the efficacy and the complication rate of these procedures. Methods A retrospective study of patients submitted to transthoracic needle cytology/core biopsy for suspected lung malignancy in a 2 year period. Results We assessed 129 episodes concerning 117 patients (213 punctures), 76% male, mean age 65,4 years. Most common localizations were RUL 35,7% and RIL 22,5%. 55% had other lesions. Cytology was performed in all patients; core needle biopsy was needed in 23,3%. 107 patients have a definite diagnosis (malignancy in 83,2%) of which 63,6% were done as an extemporaneous exam. The most frequent diagnosis was lung adenocarcinoma (36,4%) and NSCLC (12,1%). We assessed 15 episodes of pneumothorax (7% of punctures), 3 needing aspiration and 1 tube drainage, 5 small hemorrhagic episodes and 1 hemoptysis. The distance to the chest wall significantly affected the presence of pneumothorax (3,8 vs 17,6mm; p<0,01). Nodules that were diagnosed as cancer were statistically bigger than non malignant lesions (51,7 vs 33,8 mm) (p=0,01). Bigger nodules had a higher need of core needle biopsy in order to obtain a diagnosis (p=0,01). The presence of cavitation or ground glass opacification did not interfere with diagnostic accuracy. Conclusions CT-guided percutaneous lung punctures are important tools in the diagnostic approach of lung malignancies with a low rate of complications. The possibility of having a pathologist to provide an extemporaneous exam speeds the diagnosis and reduces the need for further invasive diagnosis and iatrogenic damage.