

European Respiratory Society Annual Congress 2012

Abstract Number: 3655

Publication Number: P4622

Abstract Group: 11.2. Pleural and Mediastinal Malignancies

Keyword 1: Mesothelioma **Keyword 2:** Pleura **Keyword 3:** Lung cancer / Oncology

Title: Relevance of FDG-PET-CT scan for the evaluation of local pleural invasion assessed by thoracoscopy in malignant pleural mesothelioma

Dr. Valentina 21323 Pinelli valentina.pinelli@gmail.com MD ¹, Dr. Elisa 21324 Roca elisaroca@gmail.com MD ², Dr. Sophie 21325 Laroumagne Sophie.LAROUMAGNE@ap-hm.fr MD ², Dr. Silvia 21326 Lucchini lucsilit@yahoo.it MD ³, Dr. Gian Franco 21327 Tassi gianfranco.tassi@spedalicivili.brescia.it MD ¹ and Prof. Philippe 21331 Astoul PhilippeJean.ASTOUL@ap-hm.fr MD ². ¹ Pneumologia, Spedali Civili, Brescia, Italy, 25123 ; ² Thoracic Oncology, Pleural Diseases, and Interventional Pulmonology, North Hospital, University of The Mediterranean, Marseille, France, 13915 and ³ Medicina Nucleare, Spedali Civili, Brescia, Italy, 25123 .

Body: INTRODUCTION: FDG-PET-CT scan(PET) is now widely recognized as an important staging modality in many cancers and PET standard uptake value(SUV) is reported as a prognostic indicator in several malignancies. However only a few previous studies have investigated the utility of PET in malignant pleural mesothelioma(MPM). We hypothesized that pleural assessed by PET might be in accordance to pleural characteristics evaluated by thoracoscopy. METHODS: 29 patients with a diagnosis of MPM obtained by thoracoscopy were previously evaluated byPET, and considered valuable for this analysis. Among them, 10.34%, 20.69%, 44.83%, 24.14% were assessed as I,II, III, IV stage respectively. There were 10.34% of patients in stage I, 20.69% in stage II, 44.83% in stage III, and 24.14% in stage IV. The histological analysis showed 86.21% epithelioid, 3.45% sarcomatous and 10.34% biphasic types. RESULTS: At thoracoscopy there were 16 (55.17%) patients with visceral pleural involvement, 21 (72.41%) with diaphragmatic involvement and 2 (6.90%) with mediastinal involvement. All of them had an invasion of the costal parietal pleura. There was a significant difference (<0.05) of the medium SUV between the patients with a visceral pleural involvement and the patients without this feature. Moreover statistically significant differences of the medium SUV was shown between patients with or without pleural nodules. CONCLUSIONS: These findings suggest that pleural evaluation by PET should in accordance to the characteristics obtained by thoracoscopy. There is a significant difference between the site of pleural involvement and/or the typology of tumoral lesions and the SUV of PET.