## **European Respiratory Society Annual Congress 2012**

**Abstract Number: 5065** 

**Publication Number: P3565** 

Abstract Group: 1.3. Imaging

Keyword 1: Imaging Keyword 2: Elderly Keyword 3: No keyword

**Title:** Chest HRCT findings in non-smoking, asymptomatic elderly subjects with normal echocardiogram and pulmonary function tests

Mr. Daniel 12522 Winter danielhwinter@gmail.com MD <sup>1</sup>, Mr. Marcos 12523 Manzini marcosmanzini01@gmail.com MD <sup>1</sup>, Dr. Alexandre 12524 Busse alexandre.busse@hcnet.usp.br MD <sup>2</sup>, Dr. Omar 12525 Jaluul jaluul@uol.com.br MD <sup>2</sup>, Ms. Tânia 12526 Guimarães taniavvg@yahoo.com.br MD <sup>2</sup> and Prof. Dr Mario 12546 Terra-Filho pnemario@incor.usp.br MD <sup>1</sup>. <sup>1</sup> Pulmonary Division, Heart Institute (InCor) do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, Brazil and <sup>2</sup> Department of Geriatrics, Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, SP, Brazil .

**Body:** Background The study of the normal ageing process is becoming more important as life expectancy increases. To our knowledge, no studies reporting chest HRCT findings in asymptomatic, non-smoking elderly subjects with both normal echocardiogram and PFTs were conducted. Objectives To describe chest HRCT findings in a population of asymptomatic, non-smoking elderly subjects with normal echocardiogram and PFTs. Methods After institutional approval, patients over 65 years old recruited from the Geriatrics outpatient clinic were studied and compared with normal volunteers under 50 years old. Written consent was obtained. Participants were submitted to a questionnaire, echocardiography and PFTs for assessing absence of disease, and afterwards submitted to chest HRCT. Scans were interpreted and findings were scored, including pulmonary nodules, cysts, parenchymal bands, interlobular septal thickening, reticular opacities and bronchiectasis. Non-parametric tests were used for the statistical analysis, with P < .05 representing statistical significance. Results The HRCT findings of 53 asymptomatic subjects over 65 years old (mean age 74,6 yrs) were compared with those of 24 volunteers under 50 years old (mean age 35,7 yrs). The prevalence of abnormal scans was higher in the elderly (84,9% vs 12,5%, P < .001). Comparing both groups, significantly more elderly subjects had scans with parenchymal bands (35 vs 3; P < .001), interlobular septal thickening (12 vs 0; P = .014) and lung nodules (10 vs 0; P = .026). Conclusion Parenchymal bands, interlobular septal thickening and lung nodules are present in asymptomatic elderly subjects and may represent normal ageing of the lungs.