

European Respiratory Society Annual Congress 2012

Abstract Number: 501

Publication Number: P3961

Abstract Group: 6.1. Epidemiology

Keyword 1: COPD - diagnosis **Keyword 2:** Health policy **Keyword 3:** Lung cancer / Oncology

Title: The efficacy of COPD detection by using a community-based annual screening program for lung cancer

Prof. Dr Yasuo 3795 Sekine ysekine@tymc.twmu.ac.jp MD ¹, Dr. Kiminori 3796 Suzuki kimi.suzuki@nifty.com ², Ms. Kazuko 3797 Kubota kazuko-kubota@city.chiba.jp ³, Dr. Hiroshi 3798 Ikegami hiroshi-ikegami@city.chiba.jp ³, Dr. Yuji 3799 Isobe ANA29085@nifty.com ⁴, Dr. Mitsugu 3800 Nakamura QZY03537@nifty.com ⁴, Prof. Dr Yuichi 3801 Takiguchi takiguchi@faculty.chiba-u.jp ⁵, Prof. Dr Koichiro 3802 Tatsumi tatsumi@faculty.chiba-u.jp ⁶ and Dr. Takehiko 3803 Fujisawa ta-fujisawa@kenko-chiba.or.jp ². ¹ Dept. of Thoracic Surgery, Tokyo Women's Medical University Yachiyo Medical Center, Yachiyo, Chiba, Japan, 276-8524 ; ² Dept. of Lung Cancer Screening, Chiba Foundation for Health Promotion and Disease Prevention, Chiba, Japan ; ³ Dept. of Health and Welfare, Government of Chiba City, Chiba, Japan ; ⁴ Dept. of Disease Prevention, Chiba City Medical Association, Chiba, Japan ; ⁵ Dept. of Medical Oncology, Graduate School of Medicine, Chiba University, Chiba, Japan and ⁶ Dept. of Pulmonary Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan .

Body: Study objectives: The aim of this study was to clarify the usefulness of COPD screening by using a community-based lung cancer screening program. Methods: In Japan, community-based lung cancer screening by chest X-ray has been established. Japanese residents who are 40 years old or higher can freely receive chest X-ray every year. We utilized this screening system in Chiba City in order to detect COPD. From April 2010 to March 2011, 83,924 participants received regular lung cancer screening by chest X-ray at the first examination centers, which was approximately 30% of objective residents. We set the criteria of suspicious of COPD indicating 60 years or older, positive smoking history and having any chronic respiratory symptoms. 1,170 (1.3%) were recognized as suspicious of COPD and 551 of them (56.2%) received further examination including pulmonary function test (PFT) and/or chest computed tomography (CT) as the second close examination at 39 second examination centers. Results: 138 participants (25.0%) were reported as COPD from the second examination centers and 42.2% of them were necessary for COPD treatment. Only eight participants (5.8%) were already diagnosed COPD before screening. PFT data could be collected from 173 participants, and 43 (24.9%) were diagnosed as COPD (FEV1 less than 70%). Emphysema grades according to Goddard classification on CT revealed that 21.1% was radiological emphysema. One patient with normal chest X-ray was detected lung cancer by CT and could receive curative surgery. Conclusion: COPD screening by using a community-based lung cancer screening program may be effective for detection of COPD. These patients can be treated COPD as early as possible.