論 文 要 旨

Validation of a COPD screening questionnaire and establishment of diagnostic cut-points in a Japanese general population : the Hisayama study.

佃屋　剛

Background: Chronic obstructive pulmonary disease (COPD) is highly prevalent worldwide. COPD is a treatable disease and it is important to identify COPD subjects, highlighting the need for an efficient screening measure. Although the COPD screening questionnaire (COPD Population Screener, COPD-PS) was developed as a screening tool, its validity is not clear in population-based studies. This study determines the validity of the COPD-PS in the general Japanese population.

Methods: All registered residents living in the town of Hisayama aged above 40 were solicited to participate in a health check-up in 2012. All subjects aged 40–79 without physician-diagnosed asthma or lung resection were recruited, and 2,357 subjects with the COPD-PS recorded and valid spirometry measurements were analyzed. Persistent airflow obstruction (AO) was defined by post-bronchodilator FEV1/FVC < 0.7. The sensitivity and specificity of the COPD-PS score for identifying AO was assessed by logistic regression analysis.

Results: The prevalence of AO in this population was 6.5%. The overall area under the receiver operating characteristic (ROC) curve for the continuous COPD-PS score was 0.748. A cut-point of 4-points is recommended, resulting in a sensitivity of 67.1% and specificity of 72.9% with an area under the ROC curve of 0.70. The positive predictive value was 14.6% and negative predictive value was 97.0%.

Conclusion: The COPD-PS appears to be an adequate measure for large scale screening of possible airflow obstruction requiring further testing with spirometry.