

POSTER PRESENTATIONS

S5_P1

CUT-OFF OF THE BRIEF-BESTEST TO PREDICT FALLS IN PEOPLE WITH ILD

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Falls are the 2nd leading cause of unintentional injury deaths worldwide. Poor balance has been associated with increased risk of falls in people with chronic obstructive pulmonary disease (COPD), however little is known about balance in people with interstitial lung disease (ILD). The Brief-Balance Evaluation Systems Test (Brief-BESTest) is a comprehensive balance measure, which allows tailoring balance training, however, its ability to identify risk of falls in people with ILD is unknown. We explored its ability in distinguishing people with ILD with high/low risk of falls. The Brief-BESTest was collected and a ROC curve analysis performed to assess its ability to differentiate between people with ILD with (≥ 1) and without (0) history of falls. A fall was defined as “an unexpected event when you find yourself unintentionally on the ground, floor or lower level”. History of falls was explored with 2 questions: (1) “Have you had any fall in the last 12 months?” and, if yes, (2) “How many times did you fall down in the last 12 months?”. The optimal cut-off point was identified by the highest Youden index. Differences between people with/without history of falls were explored with independent t-tests. 67 people with ILD (66 ± 12 y; 56.7% ♀; FVC $80.8 \pm 18.8\%$ predicted; DLCO $56.8 \pm 22.2\%$ predicted) were included. From these, 20 had, at least, 1 fall in the previous year. People with history of falls were older (63 ± 10 vs. 72 ± 13 y, $p=0.015$), had a worst DLCO (60.8 ± 21.3 vs. $46.8 \pm 21.9\%$ predicted, $p=0.032$) and worst balance (Brief-BESTest 17.8 ± 5.2 vs. 13.5 ± 6.4 points, $p=0.012$) at baseline than those without. A cut-off point of 16 points in the Brief-BESTest for high risk of falls (AUC=0.71; 95%CI 0.56-0.85; 65% sensitivity; 75% specificity; accuracy=0.71) was found. A cut-off of 16 points in the Brief-BESTest may be helpful to easily identify those at risk of falling, and implement tailored interventions to improve balance.

Keywords: ILD, Brief-BESTest, Falls, ROC

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