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.*

PC 023. ABILITY OF THE CHESTER STEP TEST TO DETECT FUNCTIONAL IMPAIRMENT AND MORTALITY RISK IN PATIENTS WITH INTERSTITIAL LUNG DISEASE

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People with interstitial lung disease (ILD) often experience disabling symptoms, which impairs their functional capacity, further accelerating disease progression. The 6-minute walk test (6MWT) has been the most widely used field test to assess functional capacity and to discriminate the mortality risk in people with ILD. Nevertheless, its application across settings (e.g., patients' homes) is often limited due to the need of a 30 m corridor. Alternatives to assess functional capacity in these settings have been emerging, such as the 1-minute sit-to-stand test (1-minSTS) and the Chester step test (CST). However, the first does not allow exercise prescription. The CST is a simple and low-cost field test, which enables exercise prescription and requires minimal physical space to assess functional capacity. Its suitability to be used as a first-line screening tool to detect functional capacity impairment and mortality risk in people with ILD is however unknown. Thus, the aim of this study was to determine the discriminative ability of the CST in distinguishing people with ILD with or without functional impairment and low or higher risk of mortality. A retrospective cross-sectional study was conducted with stable (i.e., no history of acute cardiac events, acute exacerbations or other respiratory complications in the previous month) people with ILD. The following measures were collected: CST, 6MWT and 1-minSTS. A receiver operating characteristics (ROC) curve analysis was performed and area under the curve (AUC), sensitivity, specificity and accuracy were calculated. We determined a threshold for the CST to identify: i) functional impairment, based on published cut-offs of the percentage predicted of the 1-minSTS and the 6MWT (both 70% predicted); and, ii) mortality, based on different established cut-offs of the 6MWT (250, 330 and 350 m). The optimal cut-off points were identified by the highest Youden index. Eighty-three people with ILD (65 ± 14 years old; 45 [54.2%] female; FVC 77.7 ± 17.9%predicted; DLCO 50.3 ± 20.7% predicted) were included in the analysis. The cut-off points of the 1-minSTS (AUC = 0.73; 95%CI 0.63-0.84; 81% sensitivity; 65% specificity; accuracy = 0.72) and 6MWT (AUC = 0.91; 95%CI 0.82-0.99; 88% sensitivity; 83% specificity; accuracy = 0.86) identified a cut-off of 40.5 steps in CST to detect functional impairment in people with ILD. All cut-offs of the 6MWT identified a cut-off of 36 steps on the CST (6MWT < 250m: AUC = 0.89; 95% CI 0.80-0.97; 86% sensitivity; 80% specificity; accuracy = 0.80; 6MWT < 330m: AUC = 0.97; 95%CI 0.93-1; 96% sensitivity; 81% specificity; accuracy = 0.90; 6MWT < 350m: AUC = 0.93; 95%CI 0.86-1; 98% sensitivity; 70% specificity; accuracy = 0.90) to detect increased risk of mortality. Healthcare professionals may now use cut-offs of 40.5 and 36 steps in the CST to accurately detect people with ILD with functional impairment and/or at increased risk of mortality, respectively, which may contribute to the implementation of tailored and preventive interventions to improve functional capacity and reduce the risk of mortality in this population.

Keywords: *ILD. Chester Step Test. Functional impairment. Mortality. Roc.*

PC 024. UNVEILING COMMON MOLECULAR PATHWAYS LINKED TO ILDS WITH PROGRESSIVE FIBROSING PHENOTYPE

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Progressive fibrosing ILDs (PF-ILDs) comprise a heterogeneous group of lung disorders associated with high morbidity and mortality, that exhibit a continuous worsening phenotype despite standard treatment. Our knowledge on the molecular determinants underlying this relentless fibroproliferative behavior and acute exacerbations are still scarce and call for fundamental studies. PF-ILDs are multifactorial conditions, which involve complex interactions between host genetics and different environmental triggers, shaping the immune milieu that ultimately drives the fibrotic cascade in a susceptible patient. Most research has been focused on idiopathic pulmonary fibrosis (IPF) and has unveiled both genomic variants of risk and specific transcriptional signatures associated with accelerated clinical courses. A previous work from our group revealed that the variant MUC5B rs35705950 T allele is associated with pulmonary fibrosis in both IPF and non-IPF cases in a Portuguese cohort, when compared with healthy controls, highlighting the hypothesis that PF-ILDs may share fibroproliferative common pathways. Herein, taking advantage of our extensive ILD patients' cohort, we observed that the cellular distribution in bronchoalveolar lavage (BAL) are comparable between IPF and fibrotic hypersensitivity pneumonitis (HP) patients. Interestingly, stratifying the fibrotic HP patients according to the MUC5B rs35705950 genotype we observed an increase in the proportion of macrophages in BAL fluid in individuals carrying the minor allele together with a slight decrease in neutrophils, eosinophils, and lymphocytes in the same patients. Additionally, soluble biomarkers are being quantified by bead-based immunoassays both in serum and in BAL collected at baseline and during acute exacerbations. Our results showed high levels of pro-inflammatory and tissue damaged-associated cytokines in patients with worst clinical outcomes. Further studies, such as the correlation of the transcriptional profiles and the host respiratory microbiome analysis, are ongoing. With this methodology, we expect to gain deeper insight into PF-ILDs common pathways, with potential use in early stratification of disease risk and paving the way for new targeted therapies.

Keywords: *Progressive fibrosing ILDS. Genetic variants. Biomarkers.*

PC 025. PLEURAL EFFUSION: AN UNUSUAL PRESENTATION OF SARCOIDOSIS

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Introduction: Sarcoidosis is a systemic granulomatous disease of unknown etiology that involves predominantly the lungs and mediastinal lymph nodes. Although other organs are frequently affected, sarcoid pleural involvement is relatively uncommon. Here, we describe a case of sarcoidosis presenting with pleural effusion and pachypleuritis.

Case report: A 24-year-old male was admitted to the hospital with dyspnea, fever and left pleural effusion. The patient had been well until 4 weeks before this evaluation, when dry cough and dyspnea emerged. Four days before hospital admission, cough and dyspnea worsened and fever developed. Physical examination was noticeable for low grade fever, tachycardia and muffled breath sounds on left lower lung field. Thoracic ultrasonography confirmed moderate volume nonseptated pleural effusion (PE). Thoracentesis revealed