

The ABCD assessment tool – relationship with the clinical outcomes of patients with COPD

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The ABCD assessment tool for patients with chronic obstructive pulmonary disease (COPD) has recently been revised. Few studies have evaluated patients' clinical characteristics based on this classification, although it may be important to adjust interventions to patients' specific needs. This study explored the distribution of the most used clinical outcomes in patients with COPD across ABCD groups.

A cross sectional study was conducted. Patients with COPD were recruited from routine pulmonology appointments and primary care centres in Portugal. Assessments included a spirometric test, quadriceps muscle strength (QMS) with handheld dynamometer, inspiratory muscle strength with the maximal inspiratory pressure (MIP), functional performance with the 1-minute sit-to-stand test (1-min STS) and health-related quality of life with the Saint George Respiratory Questionnaire (SGRQ). Patients were classified into ABCD groups based on the modified British Medical Research Council dyspnoea questionnaire and history of exacerbations in the previous year. One-way ANOVA and Bonferroni corrections for multiple comparisons were used to explore differences between groups.

Three hundred and twenty-nine patients with COPD (253 (77%) male, 67 ± 10 years old, forced expiratory volume in one second 60 ± 25 % of predicted, forced vital capacity 81 ± 23 % of predicted, body mass index 28 ± 16 kg/m²; 73 (22%) GOLD I, 133 (40%) GOLD II, 90 (27%) GOLD III, 33 (10%) GOLD IV) participated. Group A was the most prevalent (131; 40%), followed by groups B (95; 29%), D (70; 21%) and C (33; 10%). Patients from groups B and D, which are the most symptomatic, presented the worst results for all outcomes (Figure 1).

Patients from ABCD groups present different clinical characteristics. The ABCD classification appears to be important to discriminate patients with worst outcomes, hence it may be useful to personalise treatments according to patients' needs and clinical characteristics.

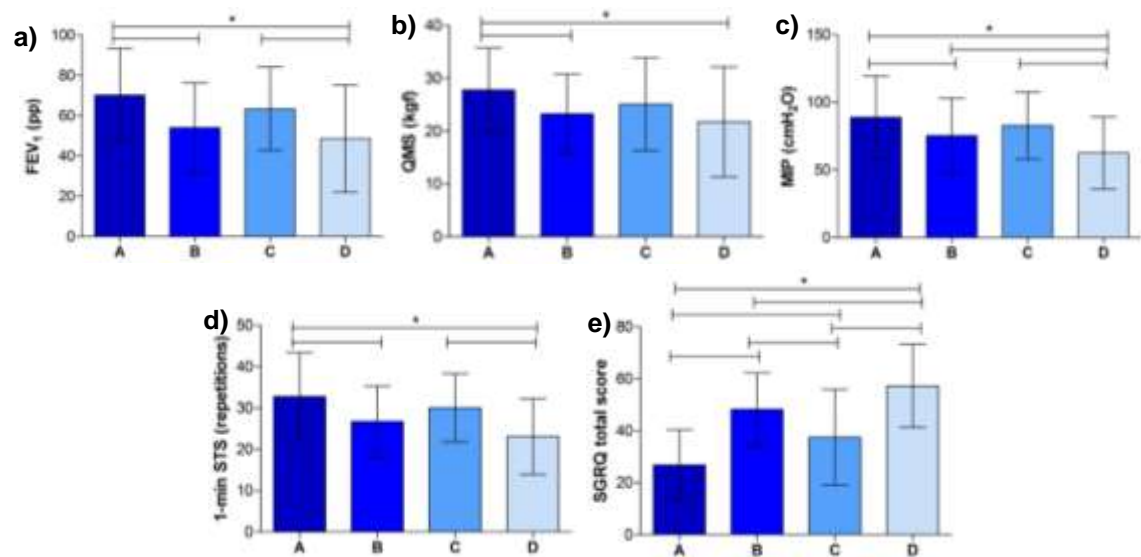


Figure 1 – Mean and standard deviation in each group in a) Forced expiratory volume in 1 second (FEV₁ - % of predicted, pp); b) Quadriceps muscle strength (QMS – kgf); c) Maximal inspiratory pressure (MIP – cmH₂O); d) Number of repetitions at 1-minute sit-to-stand test (1-min STS); e) St. George Respiratory Questionnaire (SGRQ) total score.