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Title: Severity of COPD and six-minute walk test

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Body: Background: Patients with chronic obstructive pulmonary disease (COPD) develop progressive disability and impairment in quality of life. The six-minute walk test (6MWT) is widely used do assess changes in functional exercise capacity in these patients. Aim: To evaluate the 6MWT results in COPD patients classified by severity of airflow limitation. Methods: 43 consecutive COPD patients were submitted to a spirometric evaluation and a 6MWT according to international recommendations. The distance walked, the percentage of predicted distance (Troosters' equation), the oxygen desaturation index (ODI), the Borg dyspnoea index post-test (BDI) and maximal heart rate (M-HR) were recorded. Patients were stratified according to GOLD guidelines. ANOVA test was applied to define the differences between groups; statistical significance was admitted for values of $p < 0,05$. Results: 12 patients were GOLD 2, 17 patients were GOLD 3 and 14 patients were GOLD 4. The results are shown below:

6MWT	GOLD2 (mean)	GOLD 3 (mean)	GOLD 4 (mean)
Distance walked (m)	363±99	381±95	344±95
Predicted distance (%)	62±16	56±12	53±16
ODI (%)	4±3	6±4	9±6
BDI	2±3	3±2	3±2

M-HR (bpm)	113±21	110±13	108±19
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There is significant statistical difference in ODI between GOLD 2 and GOLD 4 patients ($p=0,03$). For all the other variables there was no statistical difference between GOLD groups ($p>0,05$). Conclusion: Despite the small population analyzed, these results suggest that the 6MWT and spirometry are more likely to be complementary methods for the evaluation of the impairment in functional status of COPD patients. Nevertheless our results show that GOLD 2 patients have significant compromise of functional capacity, quite similar to more severe patients.