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Halle A-11 Session 91 12:50-14:40

**TP** Thematic Poster Session : Diffuse parenchymal lung disease: clinical profiles and collagen vascular disease

P704

**The EDD (exercise, DLco, dyspnea) index in diffuse systemic sclerosis with pulmonary fibrosis**

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**Introduction:** Pulmonary fibrosis secondary to systemic sclerosis (SSc) is the major cause of morbidity and mortality in these patients. The aim of this study was to determine the correlation of important lung function parameters with chest high resolution CT scan (HRCT).

**Methods and materials:** Thirty-two consecutive diffuse SSc patients (according to the criteria of american college of rheumatology) with pulmonary involvement were enrolled in this cross-sectional study. Patients with pulmonary fibrosis secondary to other reasons, previous restrictive lung disease, and history of smoking were excluded. Complete lung function evaluation was performed. Also the severity of dyspnea was evaluated by Modified Medical Research Council (MMRC) scale. EDD index was calculated based on 6MWT, DLco, and MMRC.

The EDD index in scleroderma lung fibrosis

	0	1	2	3
6MWT	≥350	250-349	150-249	<150
DLco	≥80%	60-79%	40-59%	<40%
MMRC	0-1	2	3	4

The chest HRCT was performed and the Warrick score recorded in all patients.

**Results:** The mean age of the patients was 39.18 years  $\pm$  9.39 (SD). Seventeen (53%) of patients were in EDD stage 1 (score:  $0 \leq \text{score} \leq 3$ ), 9 patients (28%) in stage 2 ( $3 < \text{score} \leq 6$ ), and 6 patients (19%) in stage 3 ( $6 < \text{score} \leq 9$ ). The mean Warrick score was  $10.84 \pm 6.94$  (SD). There was statistically significant correlation between EDD index and Warrick score ( $p=0.001$ ,  $r=0.72$ ). Also there was statistically significant relation in EDD stages with Warrick scores ( $p=0.002$ ).

**Conclusion:** The EDD as a useful lung function index is completely related to chest HRCT findings in SSc pulmonary fibrosis and can be used in clinical practice.