European Respiratory Society
Annual Congress 2013

Abstract Number: 1857

Publication Number: P5139

Abstract Group: 4.1. Clinical respiratory physiology, exercise and functional imaging

Keyword 1: Lung function testing **Keyword 2:** Monitoring **Keyword 3:** Physiology

Title: Assessment of exercise capacity in patients with chronic heart failure (CHF) and COPD

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Body: Ergospirometry is gold standard for assessing cardiopulmonary adaptation to exercise. Exercise tolerance is prognostic factor heart failure (CHF). OBJECTIVE: Compare exercise capacity in patients with COPD/CHF and CHF patients only. METHODS: Prospective study 122 patients with CHF. Spirometry and Ergospirometry were performed with analysis of expired gases, up to the anaerobic threshold. Underlying heart disease, diagnosis of COPD, FVC, FEV1 and FEV1/FVC, oxygen consumption, carbon production, ventilation, and heart rate test time and met Bruce stage were assesed. RESULTS: The mean age was 59 + 8 years. 78% male. The 27% have a diagnosis of COPD. The 29% are obese. Table I shows GOLD classification and type of heart disease.

Table No. I: GOLD classification and underlying heart disease.

GOLD	No (%)
I (FEV1>80%)	8 (31%)
II (FEV1 50-80%)	17 (65%)
III (FEV1 30-50%)	1 (4%)
IV (FEV1<30%)	0 (0%)
Underlying heart disease	No. (%)
Ischemic Heart Disease	33 (29%)

Dilated	68 (60%)
Hypertrophic	12 (11%)

In Table II shows VO2 ml / kg / min and the EqCO2. Bruce reached the stage for COPD / CHF: I 7% II 35% 27% III, IV 31% and for the CHF group: I 17% II 14% 34% III, IV 30% V 6%.

Table No. II: Oxygen consumption and CO2 Equivalent.

Group	**VO2 ml/kg/min**			**EqCO2**	
	<11	11-15	>15	<34	>34
COPD/CHF No. 31 (27%)	18 (57%)	2 (7%)	11 (27%)	10 (31%)	21 (69%)
CHF No.82 (73%)	3 (4%)	13 (16%)	66 (80%)	28 (34%)	54(66%)
			p=0.789		p=0.410

CONCLUSIONS: 1. Patients diagnosed with COPD and CHF have higher exercise limitation evidenced by early completion in the stress test, lower oxygen consumption and ventilatory equivalent of CO2 increased. 2. Functional assessment of patients with CHF should also include the assessment of lung function.