Abstract: **P2132**

Dyspnea severity in chronic heart failure outpatients is mainly related to prognosis than to pulmonary congestion degree

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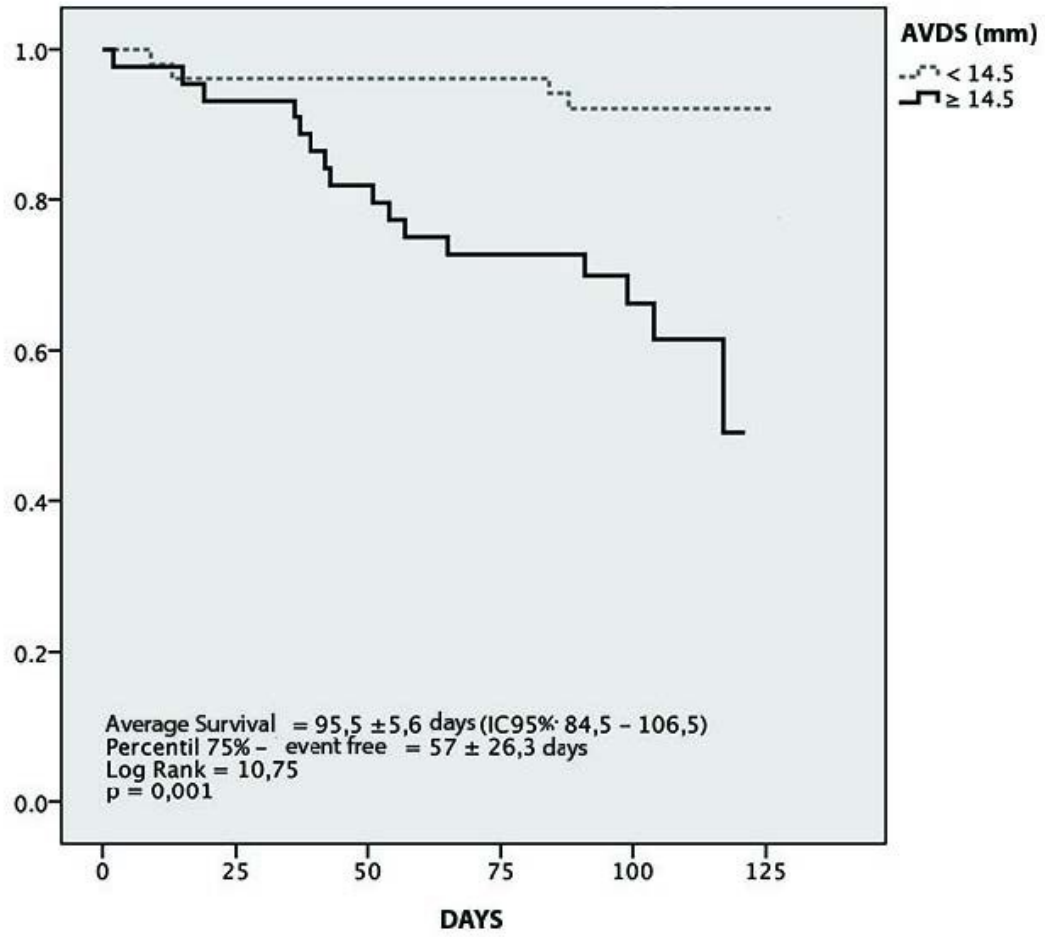
Purpose: Dyspnea is one of the main symptoms assessed during a heart failure outpatient visit. However, data are scarce on literature demonstrating the association between dyspnea severity with pulmonary congestion or prognosis. Our aim was to determine the dyspnea scale accuracy in determining extravascular lung water and prognosis in heart failure outpatient clinic.

Methods: Ninety-seven patients admitted to a heart failure clinic due to advanced systolic HF (61% men, mean age 53 ± 13years, 27% postischaemic and 54% idiopathic cardiomyopathy) were enrolled. Dyspnea analog visual scale (100mm) evaluation was independently performed during the outpatient regular visit and correlated to lung ultrasound B lines (LUS), NTproBNP, E/e' ratio, NYHA class and Minnesota scale. Patients were followed up for a median period of 106 ± 12days (interquartile range: 89115days).
Results: Overall AVDS severity was 21mm ± 22, being higher in patients with significant pulmonary congestion at LUS (total Blines number>15) 24mm ± 24 vs 13mm ± 16 (p = 0.005). AVDS C statistic to determine pulmonary congestion at LUS was 0.63 (0.50.75) with 14mm cutoff (57% sensitivity and 61% specificity). AVDS was correlated with Minnesota (r = 0.42), NYHA class (r = 0.34), LUS (r = 0.36), E/e'ratio (r = 0.22) and NTproBNP (r = 0.24). During the follow-up period, 21 heart failure admissions occurred. The severity of dyspnea at AVDS was related to events with HR = 5.2 (1.8 15; p = 0.003) (see figure). AVDS C statistic to determine adverse events was 0.69 (0.56 0.83) with 14mm cutoff (76% sensitivity; 63% specificity; 90% negative predictive value; positive likelihood ratio = 2).

Conclusion: In an HF outpatient setting, dyspnea assessment by AVDS may help mainly to identify patients most likely to be admitted than to identify patients with pulmonary congestion. Due to the multifactorial dyspnea physiopathology, this simple evaluation could help to recognize patients at risk, whose treatment should be intensified.


AVDS (mm)
< 14.5
≥ 14.5
1.0
0.8
0.6
0.4
0.2
0.0
Average Survival = 95,5 ±5,6 days (IC95%: 84,5 – 106,5)
Percentil 75% – event free = 57 ± 26,3 days
Log Rank = 10,75
p = 0,001
0
25
50
75
100
125
DAYS