QUALITY OF LIFE IN HEART FAILURE PATIENTS CORRELATES BETTER WITH 123I-MIBG THAN EJECTION FRACTION

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Background: Patients with heart failure (HF) have reduced quality of life and enhanced adrenergic activation. The relationship of quality of life with systolic function and adrenergic activation is not well understood. We evaluated in quality of life (QoL) and the cardiac adrenergic activation by 123I-MIBG, in HF patients.

Methods: The study sample was recruited from consecutive HF patients systolic HF (left ventricular ejection fraction [LVEF] ≤35%) referred to our heart failure clinic. For the assessment of QoL, the Minnesota Living with Heart Failure Questionnaire (MLHFQ) was used. LVEF was obtained by radionuclide ventriculography and cardiac sympathetic activity was assessed by iodine-123-metaiodobenzylguanidine (123I-MIBG) scintigraphy. The early and delayed heart/mediastinum (H/M) ratio and the washout rate (WR) were performed.

Results: Thirty-six patients, mean age 58 ± 12 years (24 men) were studied. Mean MLHFQ scores were 44.9±30.4. Unadjusted analysis demonstrated a significant relationship between increased MLHFQ scores and late H/M (r = -0.44; p 0.04) and WR (r = 0.445, p = 0.023). LVEF did not correlated to QoL (r= -0.2444, p = 0.23). Only the WR correlation remained significant in multivariable linear regression analysis (r² = 0.198, p =0.023).

Conclusion: Cardiac 123I-MIBG correlated better than ejection fraction with quality of life in systolic heart failure patients. The impact that adrenergic activation has on QoL enhances the importance of autonomic modulation for symptoms improvement in HF.