**IMPACT OF N-TERMINAL BNP LEVELS IN PATIENTS WITH SEVERE VALVULAR AORTIC STENOSIS**

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Aim: Echocardiography is used to evaluate and follow up patients with aortic stenosis. Nevertheless, current echocardiographic parameters have limitations in predicting symptom onset & clinical outcome. Association of BNP with symptom onset in aortic stenosis although validated may be used as a hemodynamic marker to predict outcome in severe AS. Aim is to investigate the role of NTproBNP in evaluation of patients with severe valvular aortic stenosis.

Method & Results: A Study designed to include 45 consecutive patients with severe valvular aortic stenosis admitted for Aortic Valve Replacement. Venous blood samples were drawn for measurement of NT-proBNP both pre and post procedure and compared with echocardiographic parameters of AS severity Statistical evaluation revealed mean value of NTpro BNP as 1639.56±2269.49pg/ml compared to normal value of 125pg/ml. BNP value showed a significant positive correlation with NYHA class and a significant negative correlation with echocardiographically derived Left Ventricular Ejection Fraction. Other echocardiographic parameters having a significant positive correlation with BNP were (LVIDd), LVIDs and ESV. Mean or peak gradient across the aortic valve did not have a significant correlation with BNP levels. It also showed positive correlation with grade of AR and presence of significant CAD, not statistical significant.

Conclusion: Serum NT pro-BNP assay is useful for evaluation of patients with aortic stenosis. Better correlation observed with symptoms and left ventricular dysfunction, except with aortic valve gradient. It may be useful in selecting asymptomatic patients with severe aortic stenosis for definitive treatment.