

wall. Only one patient developed third degree AV block which required temporary pacing.

Conclusion: Early intervention if necessary when the patient is in sinus rhythm. Adequate rate control by pharmacological means before subjecting the pts to PTMC. Optimizing the dose of digoxin so that it neither causes brady arrhythmia, at the same time preventing tachyarrhythmias. Every effort to be made to avoid low puncture, balloon slippage and inadvertent manipulation of guidewires and catheters. One must be ready to do pacing if warranted. Meticulous pre procedural evaluation, patient preparation and careful handling of hardwares will prevent arrhythmia related complications.

Redo percutaneous transvenous mitral commissurotomy procedural success and immediate results: A tertiary care single centre experience

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Background: After Percutaneous transvenous mitral commissurotomy (PTMC), symptomatic mitral valve restenosis develops in 4 to 39 % cases. The current study aims to identify demographic, clinical characteristics, echocardiographic parameters that may predict the successful result of redo PTMC in post-PTMC symptomatic mitral restenosis.

Methods: Single centre retrospective observational study of in hospital patients in last 5 years Successful PTMC was defined as MVA > 1.5 cm² without a postprocedural MR grade >2 using 2D Echocardiography.

Results: There were 324 patients (230 females, 94 males); mean age 33 (12 to 59 years). Median time interval from the initial procedure was 8.3 yrs (0.6 to 19 yrs). 261 (80%) were in NYHA class II. 271(84%) were in sinus rhythm and 53(16%) in atrial fibrillation. Successful PTMC was seen in 251(77.5 %) patients. Mean Wilkin score was 9.9. There was a significant increase in the mean MVA from 1.0 to 1.6 cm², mean.RVSP decreased significantly from 52 to 36 mm Hg. Four patients developed severe MR and three underwent emergency MVR. 6 patients developed cardiac tamponade requiring pericardiocentesis and one had femoral artery thrombosis treated conservatively. There were no in-hospital deaths or systemic embolisation. Unsuccessful PTMC was seen in 73(22.5%) patients. These unsuccessful results were due to post procedure MR grade >2 in 4 patients (1.2%) and suboptimal secondary MVA <1.5 cm² in 69 patients (21.3%). Predictors of poor outcome were- Right ventricular dysfunction in 16, severe tricuspid regurgitation in 10, Wilkin scores with severe subvalvular fusion in 63 & high calcium score in 20 patients.

Conclusion: Redo PTMC in patients with mitral restenosis is feasible safe procedure with good success rate and optimal results with acceptable morbidity. In patients with low echo scores and no comorbid diseases, repeat PTMC should be the procedure of choice. For patients with more extensive valvular and subvalvular deformity, redo PTMC can be used as a palliative technique in these patients when they are at high risk of morbidity and mortality with MVR due to the presence of associated significant comorbid diseases.

NT pro BNP as a potential marker of left atrial dysfunction in rheumatic mitral stenosis and its correlation with improvement in left atrial functions post percutaneous balloon mitral valvotomy (PBMV) with intermediate term follow up of 1 year

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Background: Rheumatic heart disease is a common problem in developing countries. Plasma BNP levels are affected in rheumatic heart disease, and can be correlated with disease severity.

Aims: To correlate levels of NT pro BNP with echocardiographic (including LA strain and strain rate (S/Sr) and hemodynamic parameters of LA functions and with improvement with PBMV with intermediate term follow up of 1 year.

Methods: 48 patients of severe MS undergoing PBMV were enrolled. All subjects underwent detailed history, physical examination. All the tests were done within 12 hours prior to PBMV and repeated 12 hours post PBMV, at 1 month and at 1 year. Transthoracic echo was performed using Vivid 7 echocardiographic unit (GE) Tissue Doppler Echocardiography derived S/Sr imaging were used for assessment of LA regional longitudinal function using apical 2- and 4-chamber views. Peak S/Sr were measured at each mid-LA segment (septal, lateral, anterior, and inferior) during ventricular systole (LAS) and at early (LAe) and late diastole (LAa). LAA contraction velocity was calculated using trans esophageal echocardiography and correlated with NT pro BNP levels. Invasively, cardiac output was calculated using Swan-Ganz Standard Thermodilution Pulmonary Artery Catheter and Vigilance II monitor. PCWP, pulmonary artery pressure and other cath data were correlated with NT pro BNP levels pre and post PBMV.

Results: Mean PrePBMV NTproBNP was 700 pg/ml. Mean level 1 day post PBMV was 425pg/ml, and after 1 month 300pg/ml (p<.05). At 1 year the levels of NTproBNP were 50pgm/ml. S/Sr at each mid-LA segment (septal, lateral, anterior, and inferior) during ventricular systole (LAS), at early (LAe) and late diastole (LAa) were significantly lower in the patients than in the controls (P < 0.0001).. S/Sr values improved significantly (p < 0.05) in most segments at day 1 and at post PTMC 1 month. At 1 year these values showed more than 50% increase that was related significantly with NT pro BNP levels. Also fall in mean pulmonary artery pressure, fall in PCWP and rise in cardiac output, all correlated significantly with NT pro BNP levels.

Conclusion: NT pro BNP levels correlate significantly with LA dysfunction and predict improvement in LA function post PBMV in Rheumatic mitral stenosis even at 1 year.

The correlation of NT-pro BNP with echocardiographic indices in the assessment of severity of MR

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Background: Mitral regurgitation (MR) causes progressive systolic and diastolic LV dysfunction and has negative impacts on the