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IMMEDIATE ECHOCARDIOGRAPHIC AND HEMODYNAMIC RESULTS OF PERCUTANEOUS TRANSVENOUS MITRAL COMMISSUROTOMY IN PATIENTS WITH SYMPTOMATIC MITRAL RESTENOSIS AFTER CLOSED SURGICAL COMMISSUROTOMY

Poster Contributions

Poster Hall B1

Monday, March 16, 2015, 9:45 a.m.-10:30 a.m.

Session Title: Structural

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Authors: *Md. Toufiqur Rahman, Farazi Bakhtiar Ahmed, MD. Shahidul Islam, Abdullah Majumder, Syed Haque, National Institute of Cardiovascular Diseases, Dhaka, Bangladesh, Al-Helal Heart Institute, Dhaka, Bangladesh*

Background: Mitral restenosis following surgical valvotomy is a recognized event that ensues over varying periods of time. In the absence of calcification and significant mitral regurgitation, a repeat surgical valvotomy has been performed in these patients in order to avoid insertion of a prosthetic valve and its related complication. Percutaneous transvenous mitral commissurotomy (PTMC) using an Inoue balloon catheter is of established efficacy and safety and is an alternative to surgical valvotomy in selected patients with rheumatic mitral stenosis.

Methods: A prospective study was done in National Institute of Cardiovascular Diseases, Dhaka, Bangladesh and Al-Helal Heart Institute, Mirpur, Dhaka during the period of August 2003 to June 2014. Nine hundred and ninety (990) patients with rheumatic mitral stenosis who underwent PTMC were evaluated clinically, by echocardiography and by catheter during and after procedure. Out of 990 patients 90 patients had history of previous surgical commissurotomy (Group-1) and rest 900 patients had no history of previous surgical commissurotomy (Group-2)

Results: Mean age of the study population was 30.36 ± 09.80 years in group-1 and 23.14 ± 11.21 years in Group-2. Most of the population are female, 76% in Group-1 and 78% in group-2. After PTMC mean mitral valve area increased from 0.83 ± 0.11 cm² to 1.76 ± 0.27 cm² as measured by echocardiography in group-1 and from 0.85 ± 0.32 cm² to 1.81 ± 0.33 cm² in group-2. Mitral valve gradient reduced to 11.63 ± 4.15 mm Hg from 28.46 ± 03.94 mm Hg after PTMC in group-1 and 10.45 ± 3.76 mm Hg from 26.64 ± 04.12 mm Hg after PTMC in group-2. Mean left atrial pressure as recorded by catheter before PTMC was 30.99 ± 08.37 mm Hg while after PTMC it was 13.81 ± 06.28 mm Hg in group-1 and 28.81 ± 07.32 mm Hg while after PTMC it was 11.76 ± 05.11 mm Hg in group-2. Prior surgical commissurotomy group(Group-1) had higher NYHA class higher atrial fibrillation and higher Wilkins' score.

Conclusion: PTMC is an effective procedure for patients with mitral restenosis following surgical commissurotomy.