

# WORLD CONGRESS ON RHEUMATIC HEART DISEASE

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**Title:** LONG-TERM OUTCOMES OF RHEUMATIC AORTIC REGURGITATION AFTER PERCUTANEOUS TRANSMITRAL COMMISSUROTOMY

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**Background & Aims:** About half of patients for percutaneous transmitral commissurotomy have concomitant aortic regurgitation. Relieving the mitral stenosis by percutaneous transmitral commissurotomy (PTMC) would theoretically increase the aortic regurgitation, however, studies on short-term outcomes showed otherwise. This study aimed to describe the long-term outcomes post-PTMC in terms of clinical and echocardiographic data associated with progression of aortic regurgitation and development of major adverse cardiovascular events.

**Methods:** This was a descriptive study. Review of records was done on patients who underwent PTMC at the Philippine Heart Center from 2004-2010. Patients' transthoracic echocardiograms 10 years after percutaneous transmitral commissurotomy were also reviewed. They were also followed up through phone interviews to determine occurrence of major adverse cardiovascular events such as mortality, readmission for heart failure, aortic valve surgery and stroke.

**Results:** This study included 23 post-PTMC patients with mild to moderate aortic regurgitation. Twelve (52%) had significant outcome. Six (26%) of them developed significant aortic regurgitation and 9 (39%) of them developed major adverse cardiovascular events (MACE) on follow-up after 10 years. Also, 88.9% of patients who had MACE had atrial fibrillation at baseline. Patients with significant outcome had higher LVEDD (4.83 +/- 0.60), higher LVMI (110.92 +/- 33.73) and higher LAVI (91 (70 to 105)).

**Conclusions:** After a follow-up of 10 years, 52% of post-PTMC patients with mild to moderate aortic regurgitation eventually developed significant aortic regurgitation and MACE. Clinically, patients with MACE had atrial fibrillation. Echocardiographically, patients with significant outcome had higher LVEDD, LVMI and LAVI. On follow-up, participants with or without significant outcome also had either increase in LVEDD or LVESD.