Mitral stenosis in pregnancy- Management options

Seema Chopra
Post Graduate Institute of Medical Education and Research, India

Mitral valve stenosis is a state of relatively of fixed cardiac output. Normal mitral valve area is 4 to 5cmsq. Symptoms with exercise seen with valve area of less than 2.5cmsq. Symptoms at rest are expected at area of 1.5 or less. Severe stenosis is area less than 1cmsq.

Prepregnancy: Goal is to define the severity of disease. 2D echo and color doppler are method used. Allows noninvasive evaluation and decrease need for cardiac catheterization.

Prenatal: Aim is to avoid cardiac decompsation. Symptoms of other findings should be reported promptly. Avoid maternal tachycardia, restrict physical activity.

Medical management: B-Blockers used empirically to prevent the tacycardia. AF can be managed with digoxin or cardioversion. Serial echoes are used to follow cardiac function objectively.

Surgical management: Surgical commissurotomy is the traditional modality.

BMV-Advantages: Safe, As effective as surgical approach, Less invasive, Less expansive, Preferred as first line in prenatal period.

Indications severe symptomatic mitral stenosis. Refractory pulmonary oedema despite medical management.

Factors to be evaluated Echocardiographically:
Valvular rigidity, valvular calcification, valvular thickening, amount of subvalvular disease, four factors are evaluated from 0 to 4 depending on severity.

Contraindications

Absolute: Evidence of left atrial thrombus, Severe dilation of aortic root, Thorolumber scoliosis
Rotational abnormalities of heart, Thickening of atrial septum >4mm, Recent thromboembolic event, Left ventricular thrombus, Relative Severe mitral valve calcification, Severe subvalvular fibrosis

Best time to perform Before pregnancy. During 2nd trimester, After attaining the period of viability
Complications Mitral regurgitation, Complications associated with trans septal puncture.

Uncomplicated procedure. Yielding MVA of 1.5cmsq or more. Or 40% increase in MVA. Immediate post op MR grade less than 3+

Biography

I have done my MBBS, Post graduation in obstetrics and gynaecology from Maharishi Dayanand University and am presently working as a consultant in PGIMER, Chandigarh. Looking after cardio obstetric clinic is my area of interest. I have more than 30 publications in national and international journals. Life member of many societies.