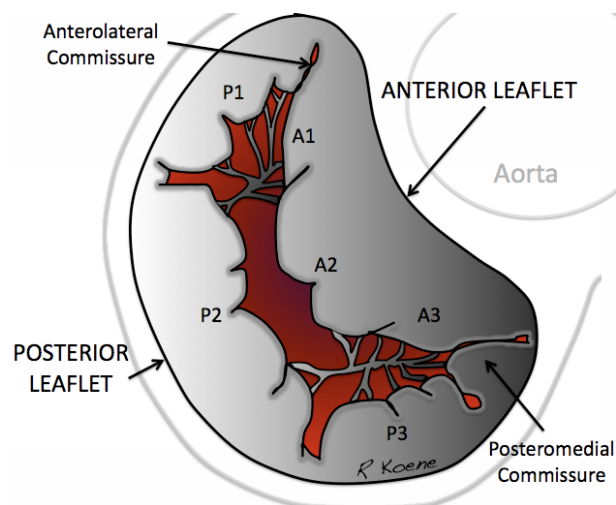


MIRAL VALVE

Connects LA to LV. It opens during diastole to allow blood to flow from the LA to LV

Normal function depends on:

LA wall
LV wall
Annulus
Leaflets (2)
Chordae Tendinae
Papillary Muscles



MITRAL VALVE STENOSIS:

Obstruction of LV inflow at the level of the mitral valve due to a structural abnormality of mitral valve apparatus.

- Congenital – ASD and rheumatic fever = Lutembacher Syndrome
- Acquired – Valve becomes thickened and calcified – leading to stenosis. Most common cause is rheumatic fever

2/3 female – due to rheumatic fever

1:100,000 prevalence

As orifice size decreases pressure gradient across the valve increases to maintain adequate flow

LA pressure increases due to transmitral pressure gradient.

This leads to LA dilation, which could lead to AF (risk of thromboembolism, increased risk of stroke)

LV filling is impaired so there is a reduced cardiac output

Pulmonary hypertension may develop; this can be as a result of retrograde transmission of LA pressure/ pulmonary arteriolar pressure/ interstitial oedema

As pulmonary arteriolar pressure increases it leads to RV dilation and tricuspid regurgitation

As severity of stenosis increases, cardiac output decreases

TREATMENT:

Medical therapy – treat cause (e.g. rheumatic fever)

Surgical valve repair/ replacement

Balloon valvuloplasty – minimal valve disease

Transcatheter repair