

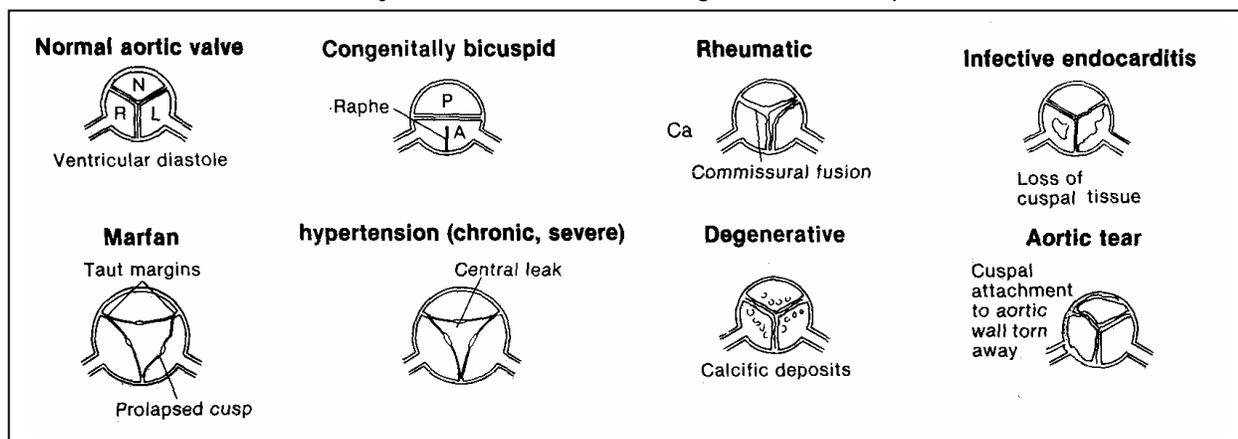
33. Aortic Insufficiency

A. Murmurs

1. Decrescendo early diastolic murmur
2. Chronic = Long murmur, Acute/Severe = Short
3. Austin Flint-Murmur of mitral stenosis due to AI jet across anterior mitral leaflet.

B. Etiologies

1. Congenital - bicuspid valve
2. Infection - Endocarditis & Rheumatic Heart Disease
3. Aortic Root Dilatation (\pm Aneurysm)
 - a. Hypertension, atherosclerosis are most common in older persons
 - b. Trauma is most common cause in younger persons
 - c. Aortitis (inflammation) or abnormal collagen
4. Aortitis
 - a. Vasculitis - Takayasu, Giant Cell (Temporal), Behcet's Syndrome, Cogan's Syndrome
 - b. Infectious Aortitis - syphilis is most common
 - c. HLA-B27 associated disease
5. Abnormal Collagen
 - a. Marfan's Syndrome, Ehlers-Danlos syndrome, Osteogenesis imperfecta
6. Rupture, spontaneous or traumatic
7. Subvalvular Disease: aneurysm of sinus of Valsalva, high ventricular septal defect



C. Physical

1. Corrigan's Pulse-"Waterhammer" pulse - rapid rise with sudden collapse
2. Duroziez's Sign - to and fro murmur over femoral artery on light stethoscope compression
3. Quincke's Pulse - capillary pulsations (apply pressure to nail, get flushing then paling)
4. Muller's Sign-Uvula pulsation, de Musset's Sign-Head bobbing, Hill's Sign- Leg BP >20 mmHg, Becker's Sign-Retinal pulsations, Traube Sign-systolic murmur over femoral artery.
5. Bisferiens Pulse-Two systolic peaks.
6. Widened pulse pressures: systolic >160; diastolic <40 mmHg

D. Imaging Studies

1. Cardiomegaly on CXR and EKG-LVH + Strain on EKG
2. Echocardiography is the mainstay of monitoring progression

E. Treatment

1. Lower blood pressure (afterload reduction) to decrease regurgitant flow
2. Nifedipine-XL 30 to 90 mg has been shown to delay time to valve replacement
3. Enalapril appears to be superior to hydralazine in reducing LV dilatation at 12 months
4. Valve Replacement when symptoms of heart failure (CHF) occur
5. Valve replacement may be indicated when LV intraventricular LVIDes approaches 55 mm
6. Significant problems are uncommon compared with mitral regurg and aortic stenosis