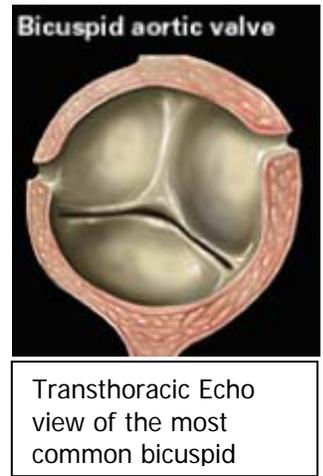


31. Bicuspid Aortic Valve



Incidence:

- Most common congenital abnormality (except for MVP).
- 2% of population
- Found in 60% of pts with aortic stenosis between ages of 15-65 yrs
- 2.5x more common in males over females

Exam Findings:

- Early systolic ejection click which is best heard at apex and does not vary with respiration
- Soft, early, midsystolic murmur at RUSB
- Soft murmur of AR may also be heard

Diagnostic Test:

- 2-D Echo (85% sensitive)
- TEE occasionally used if TTE indeterminate

Natural History and Prognosis:

- Most common complication is calcification of AV
- 85% of cases of calcific AS before age 70 are congenitally bicuspid
- Abnormal hemodynamic stresses result in progressive fibrotic thickening and calcification of the leaflets with loss of mobility
- Most common cause of AS under age 65. After age 65, most AS occurs in calcific degeneration of a normal trileaflet valve
- Less common ramifications is predominant AR
- May first be recognized during infective endocarditis
- Dilated Ascending Aorta Root common (Especially with two leaflet cusps)

Treatment/Prognosis:

All pts with recognized congenital bicuspid AV should receive prophylaxis
 Follow asymptomatic pts as one would for AS or AI

