Heart Murmurs in Dogs

**DOG WITH HEART MURMUR**

**INVESTIGATION**

**Systolic**

- Young or never previously auscultated
- Middle aged and older

**Left apex**

- Mitral valve dysplasia or regurgitation

**Left base**

- Subaortic stenosis or pulmonary stenosis or functional murmur or atypical VSD

**Right**

- Tricuspid valve dysplasia or regurgitation; ventricular septal defect

**Diastolic**

- Diastolic murmurs are uncommon
  - Considerations include aortic or pulmonary valve insufficiency; mitral or tricuspid stenosis are even rarer
  - Confirm with echocardiography

**Continuous**

- Patent ductus arteriosus is most likely
  - Echocardiography is helpful to confirm

**RESULTS**

- In general, if the murmur is grade III/VI or higher, semilunar valve stenosis is likely
  - It is helpful to evaluate pulse quality as the pulse in severe subaortic stenosis is weak; it is normal in pulmonary stenosis or functional murmurs
  - Confirm with echocardiography

- Soft (grade I-II/VI), ejection-type murmurs at the left base may be functional or represent mild semilunar valve stenosis

**DIAGNOSTICS**

Diagnostic tests to help separate these differentials include radiography, ECG, or echocardiography
- Of these, echocardiography is most likely to provide a definitive diagnosis for congenital heart disease; radiographs or ECG can be supportive
Any size with fever, lameness, new murmur

VSD = ventricular septal defect