

# Small animal nursing overview: Common case presentations Cardiac

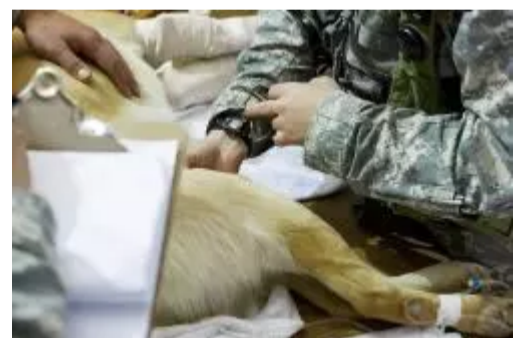


*A heart murmur in an at-risk breed can be an early indicator of heart Dz*

- 🐼 Heart disease is advanced by the time patients present for cough, exercise intolerance so better to pick up on more subtle signs earlier.
- 🐼 Always stabilize patients prior to pursuing diagnostics.

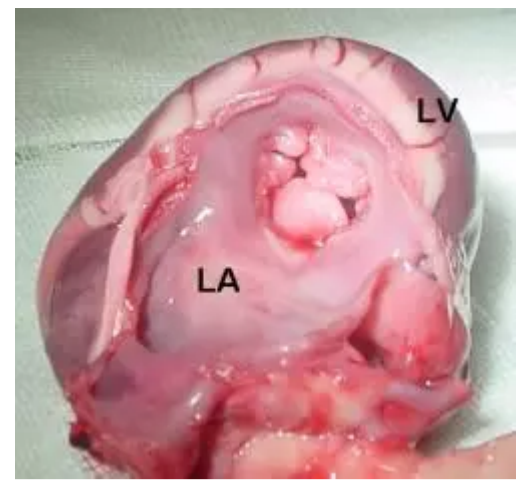
## Cardiac

- Common signs
  - Heart murmur, arrhythmia
  - Can be asymptomatic
    - Look for indicators of early cardiac Dz on physical exam ([see part 4](#))
  - Advanced cardiac Dz:
    - Cough
    - Lethargy/weakness
    - Exercise intolerance
    - Collapse
    - Tachypnea → dyspnea
- Common diseases
  - [Myxomatous mitral valve degeneration](#)
    - Most common canine cardiac Dz



*Palpate the femoral pulse in the region of the proximal, medial thigh*

- Middle-aged to older small to medium dogs
- + heart murmur
- Can progress to left-sided CHF w/ pulmonary edema
- [Dilated cardiomyopathy](#) (DCM)
  - Large/giant breeds
  - +/- heart murmur
  - +/- arrhythmia
  - Often not Dx until CHF (left- or right-sided) w/ pulmonary edema, pleural effusion, ascites
- [Hypertrophic cardiomyopathy](#) (HCM)
  - Most common feline heart Dz
  - +/- gallop sound
  - +/- heart murmur
  - +/- arterial thromboembolism (ATE)
  - +/- left-sided CHF resulting in pleural effusion, pulmonary edema
- [CHF](#): Medical emergency
  - O<sub>2</sub> supplementation
  - Diuretic therapy
  - +/- other cardiac medications



MMVD at necropsy (arrow) (LV = left ventricle, LA = left atrium)



Vets use the vertebral heart score, shown here, to objectively measure heart size

- Common diagnostic testing
  - Thoracic radiographs
    - Evaluate heart size and shape
    - Dogs w/ MMVD: Left atrial enlargement before CHF
    - Dogs w/ DCM: Global cardiomegaly
    - See signs of CHF
      - Dogs: Pulmonary edema
      - Cats: Pulmonary edema/pleural effusion
  - Electrocardiogram (ECG)
  - Systemic blood pressure
  - Echocardiogram: Gold-standard Dx

Images courtesy of [Courtney Mihaka](#) (CKCS dog), Kalumet ([MMVD](#)), Mstr Sgt. John Nimmo, Sr ([taking pulse](#)), [VERDE28](#) (vertebral heart score).

Canine