

dobutamine CRI 6.0 mcg/kg/min (11.52mg / hour) for its positive inotrope response without significantly increasing heart rate or peripheral resistance.

**Advanced skills the applicant performed**

Calculate and administer a prescribed continuous rate infusion (11)  
Identify sinus arrhythmia on an ECG (51)  
Identify ventricular premature complexes on an ECG (59)  
Identify ventricular tachycardia on ECG (61)

**Advanced skills the applicant assisted with**

Echocardiogram

**Outcome**

Patient was hospitalized with cardiology for 48 hours with telemetry revealing arrhythmias resolving to predominant sinus rhythm/arrhythmia and rare ventricular premature complexes. Patient discharged with >48 hours stable temperature, blood pressure, and a normalized attitude. Antibiotic medications started for the suspected bacterial infection included enrofloxacin 10.63 mg/kg (340mg) PO SID for 6 weeks and amoxicillin/clavulanic acid 14.65 mg/kg (468.75 mg) PO BID for 6 weeks. Started pimobendan 0.23 mg/kg (7.5mg) PO BID to help improve the strength of the heart muscle and slow down the progression of heart disease, mexiletine 4.69 mg/kg (150mg) PO TID for the treatment of ventricular arrhythmias, and continue sotalol 0.63 mg/kg (20mg) PO BID to help reduce the heart rate and force of contraction. Recheck brief echocardiogram in 1 week.

**Don't forget to SAVE your work!**

**Case Log 22**

**Initial treatment date**  
1/14/2021

**Patient ID**  
20045538

**Species**  
Canine

**Breed**  
American Bulldog Mix

**Sex**  
Male Neutered

**Age**  
8.50

**Weight in kg**  
35.0

**Diagnosis (or differential list)**

Congestive Heart Failure (decompensated), chronic valvular degeneration - severe, mitral regurgitation - severe, tricuspid regurgitation - mild, systolic dysfunction - mild to moderate, ventricular premature complexes (VPC) - mild

**Case presentation**

Presented as an emergency evaluation due to 1 week history of cough, lethargy and decreased appetite. Physical examination: auscultated grade III - IV/VI left apical systolic regurgitant murmur. Review of rDVM thoracic radiographs: mild pulmonary edema appreciated, vertebral heart score 13 (elevated). Echocardiogram interpretation: scant pericardial effusion noted, severe enlargement of left atrial size, severe eccentric hypertrophy of the left ventricle, mild to moderately systolic dysfunction, mild tricuspid valve thickening, and mitral valve moderately thickened with moderate prolapse of the septal leaflet on right parasternal four chamber long axis view; moderate mitral regurgitation and mild tricuspid regurgitation on color flow Doppler. Occasional singlet VPC noted during echocardiogram's electrocardiogram. Electrocardiogram performed and interpreted: sinus tachycardia with occasional monomorphic singlet VPCs and rare monomorphic couplet VPCs; heart rate 200 bpm, P wave duration - 0.06s (elevated), P wave amplitude - 0.3mV, P-R interval - 0.09s, QRS duration - 0.06s, R wave amplitude - 2.3mV, Q-T interval - 0.18s, T wave amplitude - 0.5mV.

**Advanced skills the applicant performed**

Identify pericardial effusion on echocardiogram (66)

**Advanced skills the applicant assisted with**

Echocardiogram

Identify mitral valve thickening on echocardiogram (73)  
 Identify left atrial enlargement on echocardiogram (77)  
 Acquire and print a 50 mm/sec ECG strip for measurement (34)  
 Calculate the P-R interval on an ECG (39)  
 Calculate the Q-T interval on an ECG (40)  
 Calculate the P wave amplitude and duration on an ECG (41)  
 Calculate the QRS complex duration on an ECG (42)  
 Calculate the R wave amplitude on an ECG (43)  
 Calculate the T wave amplitude on an ECG (44)  
 Identify sinus arrhythmia on an ECG (51)  
 Identify ventricular premature complexes on an ECG (59)  
 Calculate a Vertebral Heart Score on lateral thoracic radiograph (16)

**Outcome**

Patient discharged with addition of medications and exercise restrictions. Add furosemide 2.14 mg/kg (75 mg) PO TID for 3 days then decrease to BID thereafter to help remove excessive water from the body and add pimobendan 0.29 mg/kg (10mg) PO TID for 3 days then decrease to BID thereafter to help improve the strength of the heart muscle and slow down the progression of heart disease. Recheck exam, renal values and electrolytes, blood pressure, electrocardiogram and thoracic radiographs in 1 week.

**Don't forget to SAVE your work!**

**Case Log 23**

<b>Initial treatment date</b> 2/2/2021	<b>Patient ID</b> 20044256	<b>Species</b> Canine		
<b>Breed</b> Great Dane	<b>Sex</b> Male	<b>Age</b> 5.42	<b>Weight in kg</b> 65.0	

**Diagnosis (or differential list)**

Chronic valvular degeneration (CVD), mitral regurgitation (MR) - severe, tricuspid regurgitation (TR) - mild, systolic dysfunction, atrial fibrillation (AFib) and congestive heart failure (CHF).

**Case presentation**

Presented for a 1 month recheck following an emergency exam for dyspnea, lethargy and inappetence with pleural and peritoneal effusion diagnosed. Patient was previously diagnosed with CVD, MR, TR, and AFib initially 7 months ago. Physical examination: auscultated grade II/VI left apical systolic murmur with an irregular rhythm; weak synchronous femoral pulses; normal bronchovesicular sounds. Brief ultrasound revealed no pleural or peritoneal effusion. Electrocardiogram performed and interpretation (patient standing): atrial fibrillation at a heart rate of 222 bpm with a normal axis, occasional multiform ventricular premature contractions with one 4 beat run of ventricular ectopy noted at 160 bpm; Q-T interval - 0.14 s, QRS interval - 0.08 s (elevated), R wave amplitude - 1.6 mV, T wave amplitude - 0.4 mV; identified motion artifacts due to patient in a standing position and shivering.