NORTHWEST CARDIOLOGY CONSULTANTS
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Exam No:	**22820**	Client/Agent:	**MORGAN, SANDRA**
Date:	**21 September 2009**	Patient:	**Keisha**
Hospital:	**Norton's Ark Veterinary Clinic**	Species/Breed:	**Canine / Pug**
Doctor:	**Keith Norton**	Sex/DOB/Wt:	**Female / 02-Jul-2007 / ≈ 15 lbs**

CARDIOVASCULAR EXAMINATION REPORT

History: Incidental radiographic cardiomegaly detect evaluation for pregnancy. No reported, exercise intolerance or previous history of cardiac disease. Minimal travel history, but heartworm negative.

Physical Examination: Alert, stridor. HR≈ 125 bpm, irregular rhythm (sinus arrhythmia). No murmur detected. No S_3 diastolic gallop. Normal femoral pulses. No ectopy heard. Referred upper airway noise and reverse sneezing.

Thoracic Radiographs: Borderline cardiac silhouette enlargement, with slightly prominent RV. Normal pulmonary alveolar/interstitial pattern. Normal pulmonary bronchiolar and vascular pattern. Normal mediastinum. No pleural effusion.

Echocardiogram: Normal RA/RV size. Normal LA size (LAd≈ 21.6 mm). Normal LV chamber size (LVIDd= 25.2 mm). Normal LV function (SF≈ 38%). Normal LV wall thickness (IVSd= 10.3 mm, LVPWd= 7.7 mm). Normal tricuspid, pulmonic, mitral and aortic valves. Normal pulmonary artery. No tricuspid regurgitation. Color flow Doppler shows normal flow at all valves. Normal LV and RV outflow tract flow with normal velocity. No pleural or pericardial effusion.

Diagnosis: NORMAL CARDIOVASCULAR EXAMINATION

Comments: The overall findings point toward an normal cardiovascular examination— No evidence for congenital heart defects or emerging myocardial, pericardial or valvular heart disease. No indicators for pulmonary hypertension. No arrhytmias detected. The radiographic cardiomegaly is possibly from an "optical illusion" which can be generated by lateral rotation, expiratory technique (expiration), increased cardiac/thoracic ratio in smaller breeds and radiographs at maximum diastolic filling with possible increased cardiac and pericardial fat.

Recommendations:

[1] No indication for cardiac medication.

[2] No increased risk for anesthetic complications beyond inherent anesthetic risks for age and breed. Standard protocols for induction and maintenance with isoflurane or sevoflurane, except avoid xylazine, acepromazine. Monitor cardiac status closely (ECG, BP, and O_2 sats if available). Consider atropine or glycopyrrolate if baseline HR < 100 bpm or decreasing HR under anesthesia. Monitor for tachypnea or labored breathing 24-48 post anesthesia. Avoid aggressive fluid support, but still maintain adequate mean BP. Prophylactic antibiotics are optional.

[3] Continue to monitor for new murmur, heart rate and rhythm pattern. If any evidence for murmur intensity, development of jugular pulse, louder gallop, and runs of tachycardia or ectopy, dyspnea, or extreme lethargy then will consider repeat cardiac exam and echocardiogram.

J. A. Woodfield, DVM
Diplomate, ACVIM (Cardiology)

21 Sep 2009