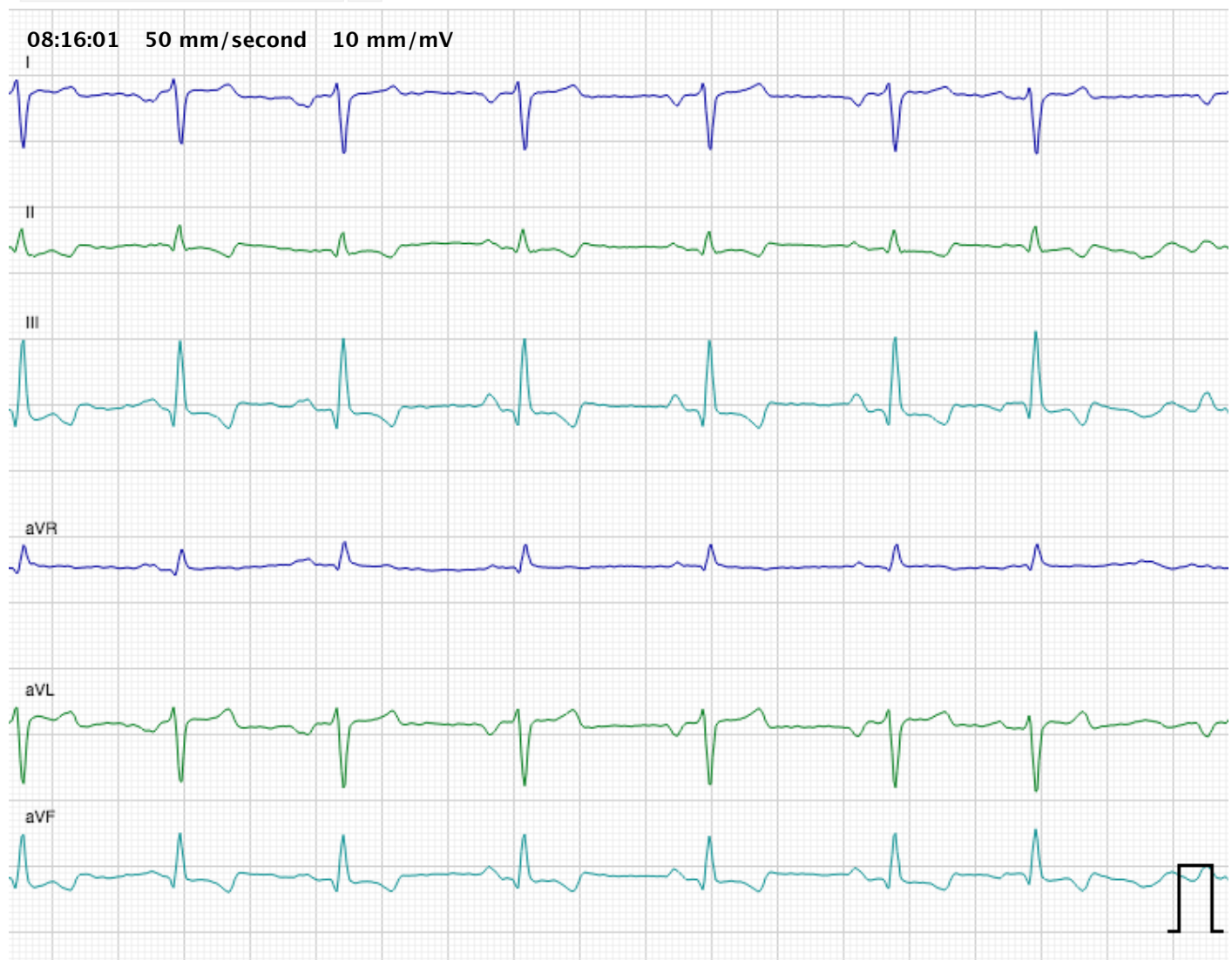


Type: Rest ECG **Date:** 07/06/2019 08:15:33 **Duration:** 00:02:35

Patient name:		Weight:	8.3 kg	Species:	Dog
ID:		History		Breed:	
Email:		Medications:		Owner:	
Phone Number:		Code-procedure		Spayed/Neutered	No
Sex:	M				
Age:	8				



Report / Conclusion:

A detailed analysis of 6 different leads was performed.

Heart rate and rhythm, measurable intervals and amplitudes, and deflection morphology were all examined and revealed the following data:

HR= 134/min

P= 55ms (wider than normal) & 0.25 mv

PR=90-105ms

QRS=55ms

R=1.1mv

QT=215

The heart rhythm is normal sinus rhythm with occasional (even rare, at this time) atrial premature complexes (APCs).

The Lead-I QRS is mostly negative, as in an (abnormal) right axis deviation. But since the P-wave in Lead-I is inverted as well, this could, in fact, reflect an inadvertent misplacement of the two front electrodes (switching between right front and left front limb electrodes), or, in other words, a technical issue rather than a pathological one. Assuming the two front limb electrodes have indeed been inadvertently switched with each other, the mean electrical axis (MEA) of the ventricular depolarization process is normal.

Conclusions and recommendations: the wider than normal P-wave is suggestive of left atrial enlargement, which can be confirmed radiographically. If confirmed, this would be compatible with the occasionally seen APCs. Most importantly, if the murmur is indeed continuous and is located over the left heart base, congenital patent ductus arteriosus (PDA) is highly likely, despite the reported age of 8 years. Thoracic radiography could support this possibility as well and is therefore highly recommended.

If indeed supportive, if there are no relevant clinical signs such as tachypnea, tongue cyanosis, weakness, exercise intolerance, or exercise-related coughing, do not yet start pharmacotherapy. Rather, have the owner document the sleeping respiratory rate once a day for the rest of this dog's life. Then, 10 days after the onset of this documentation, start pharmacotherapy even if there are no clinical signs, including Pimobendan at 2.5mg BID, Enalapril at 5mg AM & 2.5 mg PM, and Spironolactone at 12.5mg AM and 6.25mg PM. Next, compare the daily sleeping respiratory rate collected over the ten days following the onset of therapy to data collected over the previous ten days, to ascertain that the values have gradually decreased over these later ten days, or at least that they have not gradually increased.

This disease is both (theoretically at least) lethal, AND curable by surgical or other invasive intervention. However, if no clinical signs are present, surgery is probably not an absolute must, as performing it at such a (relatively) advanced age carries a higher risk of intraoperative hemorrhage. On the other hand, if clinical signs actually are present despite pharmacotherapy, consider referring this patient for an attempted catheterization procedure (an Amplatzer Canine Ductal Occluder, ACDO-implantation), with fluoroscopic guidance and under general anesthesia.