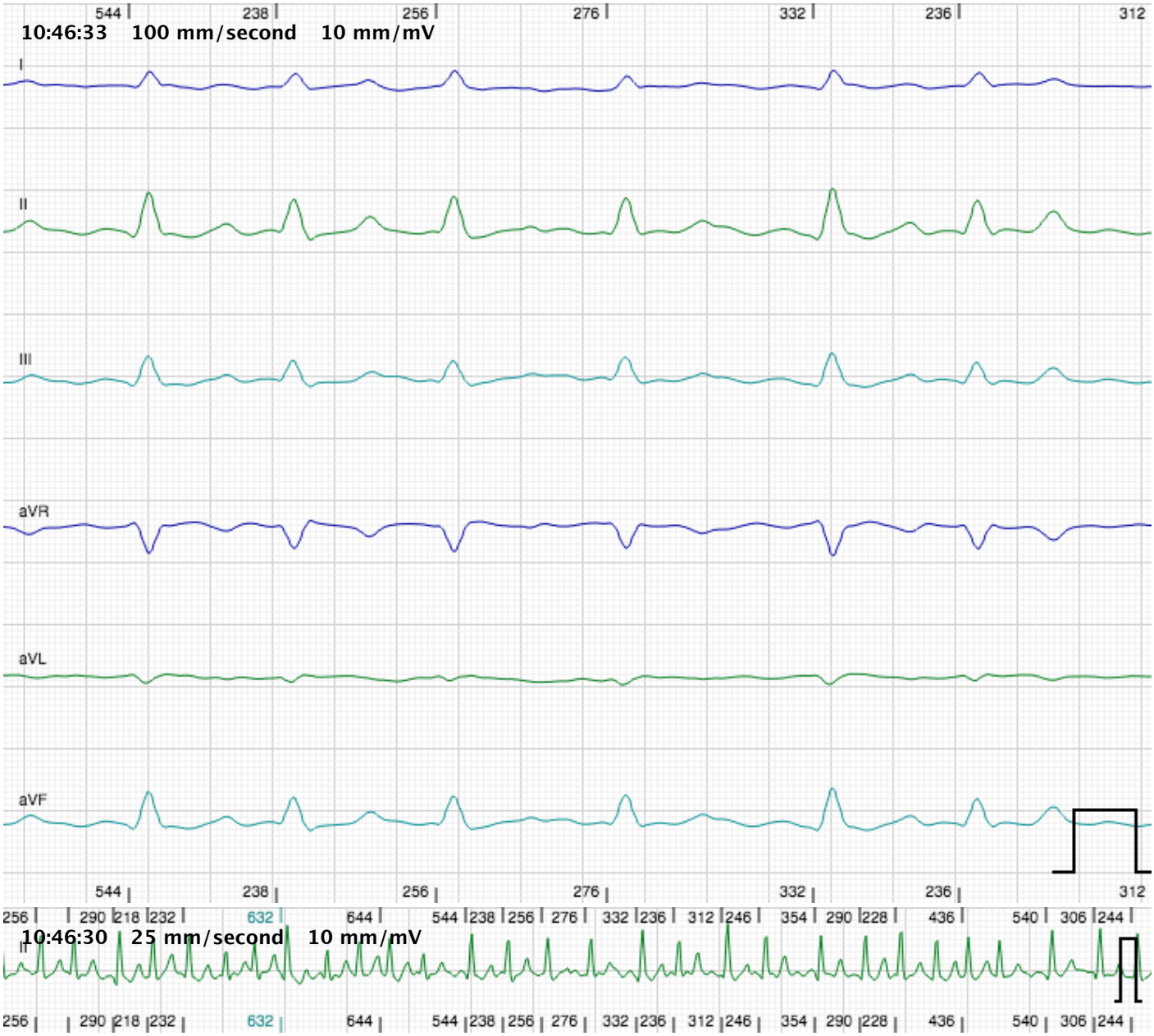
Type: Rest ECG **Date:** 13/07/2018 10:45:16 **Duration:** 00:02:31

Patient name:		Weight:	0.0 kg	Species:	Dog
ID:		History	Labored breathing, as...	Breed:	Dog de bordeaux
Email:		Medications:		Owner:	
Phone Number:		Code-procedure		Spayed/Neutered	No
Sex:	M				
Age:	4				



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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=240/min
P= Not Applicable
PR=Nor APplicable
QRS=60 ms
R=0.87 mv
QT=180 ms

The heart rhythm is very rapid and highly irregular with no evidence of P-waves in any of the recorded 6 leads, all of which is highly compatible with atrial fibrillation.

Findings: Atrial Fibrillation.

Conclusions and recommendations: Given the history, breed, and relatively young age of this patient, a congenital heart disease is possible, which have gradually resulted in atrial fibrillation and right-sided congestive heart failure as two secondary complications. One of the likely congenital conditions in this breed is Tricuspid Valve Dysplasia (TVD), which should be ruled out (or in) using echocardiography. Another possibility is primary atrial fibrillation with no congenital heart disease in the background (which is commonly present in giant breed dogs even with no organic heart disease). Until this is made possible, empirically start enalapril at 0.5mg/kg BID, furosemide at 1 mg/kg TID, pimobendan at 0.3 mg/kg TID, and Diltiazem at 1 mg/kg TID. If no azotemia, hypokalemia, anorexia, or dehydration develop after the onset of diuretic therapy, add Digoxin at 0.003 mg/kg BID and repeat the ECG in 2-3 weeks from now.

If TVD is ever confirmed, while in the short run prognosis might be reasonable, in the long run, it appears poor to guarded. On the other hand, if TVD is ruled out, primary atrial fibrillation could also be the problem, which might carry a somewhat better prognosis, especially if it has only recently started. IN this case, the owner should consider direct-current cardioversion into normal sinus rhythm using an electrical shock under brief general anesthesia. If this is what they elect, the sooner this is performed, the higher the chances of success. If they are inclined to choose this path then instead of diltiazem and digoxin, amiodarone (Procor) should be used at 14 mg/kg SID for 14 consecutive days just prior to the scheduled procedure, along with 4 doses of Ranolazine (Ranexa) at 22mg/kg every 12 hours, during the 48 hours preceding the procedure.

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