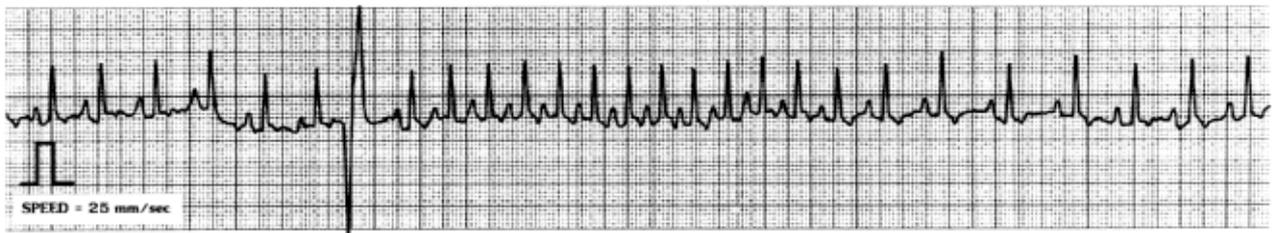


ECG Quiz

Chollada Buranakarl Kris Angkanaporn

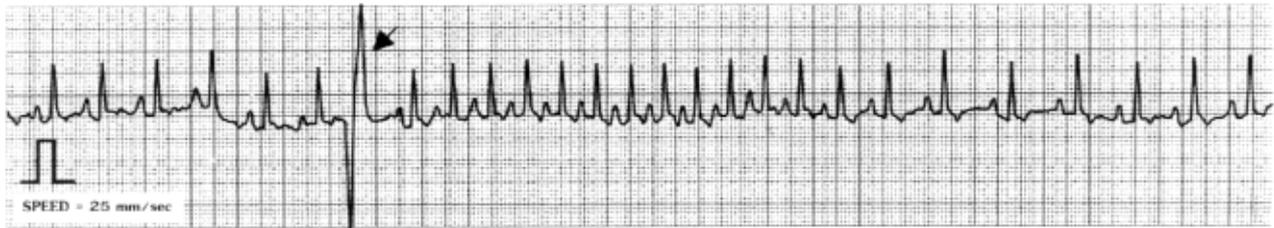


This lead aVF ECG strip was recorded from a 11 year-old, male, mixed breed dog weighing 24 kg, with a history of exercise intolerance, weakness and panting. A physical examination revealed pink mucous membranes. The blood chemistry profiles were within normal limits. A complete blood count showed a slightly high white blood cell count (14,690 cells/mm³) and increased numbers of

band cells (588 cells/mm³). A thoracic radiograph revealed moderate whole heart enlargement, mild pleural effusion in both hemithorax and moderate to severe diffuse interstitial and bronchial lung infiltration in all lung lobes.

Please make your interpretation before turning to the next page.

Paroxysmal artrial tachycardia (PAT)



The tracing illustrated the short intervening segment of sinus tachycardia. The abrupt onset and termination is characteristic of paroxysm. The basic heart rate was 120 beats/minute. When it was in transition to PAT, the rate severe fast (195 beats/minute), causing a continuation of the P wave with the preceding T wave. The morphology of the R wave and a amplitude are similar to sinus beats

indicating a supraventricular origin. It was noticed that the PAT was starting with an obvious premature ventricular complex (arrow). If the heart rate is fast and sustained, this will cause a significant deterioration in cardiac function. Dilated cardiomyopathy is the most common cause of this arrhythmia. The atrial tachycardias often need to be treated and digoxin is the drug of choice.