

Patent Ductus Arteriosus in 4 Senile Dogs

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Signalment: Four middle-aged dogs, two of which had skeletal problem and others had intermittent cough, and anorexia were presented to Royal Animal Medical Center. The first two patients were incidentally auscultated continuous murmur from left heart base and the others had been detected heart murmur from local hospital. The age range at the time of diagnosis was from 6 to 10 years (mean 8.2 years), sex distribution was fifty-fifty and all patients were Maltese dogs which had never been treated.

Results: Precordial thrill and continuous murmur had been presented in all of these patients. In ECG, all patients had Tall R wave (voltage range : 4 mV–6.5mV) and sinus rhythm and normal mean electrical axis. On Radiography, cardiomegaly (VHS range: 12.2–13.4) and tracheal elevation was detected in all patients due to the left atrial bulging and aortic arch enlargement. Pulmonary edema was found in two dogs. The left arterial and ventricular enlargement in diastolic and systolic phases were assessed in all patients by combination of the two-dimensional and M-mode echocardiographic findings, ductal size was estimated 2.7 mm to 4.8 mm on the right parasternal short-axis view. Mitral regurgitation and pulmonary edema were noted in two patients. In a dog with surgical intervention, there was obvious change of heart size on radiography and the left atrial chamber size on echocardiography.

Clinical relevance: Older dogs with a left to right shunting patent ductus arteriosus are probably more common than generally believed. In these cases, the 4 old dogs appeared no correlation between ductal size and age of onset of clinical signs, but ductal size was related severity of clinical signs that agrees to what previously has been reported. Even in old dogs, early closure is advisable to avoid mechanical stress on the mitral valve, which might predispose to development of mitral valve endocardiosis.

Key words: patent ductus arteriosus, senile patient, dogs

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