

FATAL AORTIC THROMBI AND THROMBOEMBOLISM CAUSED BY *SPIROCERCA LUPI* IN THREE DOGS: CASE REPORT

**U.G.V.S.S. Kumara, H.M.H.S. Ariyaratne, W.R.B. Kumara,
K.G.M.P. Kumara, K.W.K.I. Kamathewatta, M.H.M. Irshad,
C.M. Keerthirathne and K.A.N. Wijayawardhane***

*Department of Veterinary Clinical Sciences, Faculty of Veterinary Medicine and Animal
Science, University of Peradeniya, Sri Lanka*

**nwijayawardhane@yahoo.com*

Aortic thrombosis is characterised by formation of a thrombus attached to the vessel wall, while aortic thromboemboli are found free inside the aortic lumen. Both conditions are uncommon in dogs, and usually occur secondarily to other disease processes. Spirocercosis has rarely been reported as a predisposing factor for the above conditions. The present study reports three dogs diagnosed with aortic thromboemboli and/ or aortic thrombi associated with *Spirocercus lupi* infection.

Three cross-bred, 10-11 year-old, neutered, female dogs were presented to the Veterinary Teaching Hospital in the latter part of 2013 with complaints of sudden onset of paraplegia (C1, C2 and C3). Clinical examination revealed hypothermia and absence of femoral pulse in the cold and swollen hind limbs of all three cases with C3 additionally showing extreme pain in the hindquarters. Neurological signs included paraplegia, areflexia and lack of deep pain sensation in the hind limbs (C1, C2). Complete blood counts showed mild leucocytosis with neutrophilia and thrombocytopenia. A mild increase in prothrombin time (10.6 s) was observed in C2. Using ultrasonography we detected a 2 cm and 5 cm long occlusion in C1 and C2, respectively. These were observed cranial to the aortic trifurcation and there was no blood flow caudal to the occlusions. In C3, a thrombus and a thromboembolus were found cranial to the aortic trifurcation. The dogs were treated with enoxaparin (1mg /kg, sc) and aspirin (25 mg/kg, po, q12h) for prevention of further clotting; tramadol (2 mg/kg, iv, q12h) as an analgesic; ranitidine (2mg/kg, po, q12h), Neurobion^R (1 tab, po, q 12h) and intravenous fluid as supportive and symptomatic treatments. The animals died despite treatment, approximately 24 h after onset of paraplegia. Multiple granulomas with caseous and partially calcified centres containing live and dead *S. lupi* were found in the caudal thoracic oesophagus at necropsy. There were multifocal aneurysms in the walls of the thoracic and abdominal aorta. A possible reason for death in these cases could be loss of blood supply to vital organs.

To the best of our knowledge, this is the first report of aortic thromboembolism with canine spirocercosis in Sri Lanka and we suggest spirocercosis to be considered as a cause of canine aortic thromboembolism. This communication emphasises the importance of including spirocercosis in the differential diagnosis of dogs presented with sudden onset of paraplegia.