CLINICAL MANAGEMENT OF ASCITES ABDOMINALIS IN DOGS WITH SPECIAL REFERENCE TO RIGHT HEART FAILURE

K. Satish Kumar¹, D. Srikala², V.V.V. Amruth Kumar³, D.S. Tirumala Rao⁴

ABSTRACT

Hepatic, renal, and cardiovascular insufficiencies often lead to ascites abdominalis. Ascites due to congestive right side heart failure is not common in dogs. Moreover, there is meager scientific information about it in India. This study was conducted on 34 ascitic dogs presented at the veterinary college hospital with the history of loss of appetite, occasional vomiting, respiratory distress, lethargy, and persistent distended abdomen over a long period of time. There were distended jugular vein, cough, cyanotic tongue, seizures, and syncope in a few cases. The dogs were subjected to haematobiochemical, electrocardiographic (ECG), and ultrasonographic (USG) tests to ascertain the cause of ascites. The study revealed no perceptible change in haematology, although normocytic hypochromic anaemia with eosinophilia was noticed in a few dogs with severe endoparasitic (Ancylostoma sp. and Dipylidium caninum) infections. Elevated levels of CKMB and LDH, ALT and ALP, BUN and creatinine were noticed in dogs, associated with cardiac, hepatic, and renal involvements, respectively. ECG abnormalities were low voltage QRS complexes, deep Q wave with tachyarrhythmia. Classical ground glass appearance of abdomen and heart with increased sternal contact were the radiographic findings of the abdomen and thorax of the affected dogs. USG of abdomen revealed floating viscera in the anechoic effusion and engorged and distended hepatic vasculature. 2D echocardiography of eleven ascitic dogs revealed dilated right ventricle both on B- and M- modes. Further, mitral and tricuspid valve insufficiency was also recorded on pulsed and colour flow Doppler. Hence, congested right heart failure (CRHF) was confirmed as the cause for ascites in eleven dogs. Angiotensin receptor blocker (Losartan potassium), Aldosterone blocker (Spirolactone), hepatoprotectives (Tricholine citrate and Sorbitol), and cardiac nutraceutical (Ubiquinone) were used in the treatment of CRHF. The affected dogs fully recovered by this treatment schedule.

KEY WORDS

Ascites, Clinical management, Dog, Right side heart failure

Author attribution: ¹³Assistant Professor, ²Teaching Assistant, ⁴Professor and Head, Department of Clinical Medicine, College of Veterinary Science (Sri Venkateswara Veterinary University), Rajendranagar, Hyderabad, Andhra Pradesh, India– 500030. ¹Corresponding author: dr_petlover@yahoo.co.in Date of Receipt: 16/11/2010, Acceptance: 30/04/2011.