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ABSTRACT

The present study was aimed to study the clinical, haemato-biochemical and therapeutic aspects of ascites in dogs. The study was conducted on 2063 dogs presented to TVCC, from October 2018 to March 2020. Based upon the history, clinical signs and laboratory findings and imaging techniques, 47 dogs were found to be positive for ascites, thus representing overall incidence of 2.27%. Out of the 47 dogs, 35 dogs suffered ascites due to liver disorders (74.46%), 6 dogs due to cardiac disorders (12.76%) and 6 dogs due to renal disorders (12.76%). The incidence of ascites was higher in younger age group (1-4 years of age, 48.93%), in male dogs (76.59%) and Labrador retriever (29.78%) was the most commonly affected breed. Abdominal distension, exercise intolerance, melena, vomiting, anorexia, pale mucous membrane, dullness and depression were the common clinical signs observed. Haematology revealed normocytic hypochromic anaemia and leucocytosis. Biochemically, hypoproteinemia, hypogylcemia, increased levels of ALT, AST and ALP was observed in all the ascitic dogs. An increased level of BUN and creatinine was observed in ascitic dogs with renal disorders. The ascitic fluid analysis revealed increased levels of total protein in all the dogs and Serum Ascitic Albumin Gradient was >1.1 g/dl in dogs with liver disorders. Radiographically, ground glass appearance was observed in majority of the cases and pleural effusion and increased vertebral heart size was observed in dogs with cardiac disorders. Increased echogenicity and size of liver, kidneys and spleen, presence of free fluid, round margins of the liver lobes were some of the common ultrasonographic findings. Echocardiography revealed pericardial effusion, pleural effusion, regurgitation of the blood, ventricular hypertrophy in ascitic dogs with cardiac disorders. Electrocardiography of ascitic dogs with cardiac disorders revealed ventricular arrthymia, ventricular hypertrophy and first degree heart block. The ascitic dogs with liver disorders were treated with diuretic (Frusemide + Spironolactone), Silymarine, liver safe antibiotic and liver supportive and 13 (37.14%) dogs showed signs of recovery. Diuretic (Frusemide+Spironolactone), digoxin, ACE inhibitor (Enalapril), antibiotic and liver supportive was used for the treatment of ascitic dogs with cardiac disorders and one dog showed signs of recovery. The ascitic dogs with renal disorders were treated with 8.4% sodium bicarbonate, fluid therapy, diuretic (Frusemide+ Spironolactone), antibiotic, liver supportive and one dog showed signs of recovery. It was concluded that silymarine along with liver safe antibiotic, diuretic and liver supplements was quite useful for the treatment of ascitic dogs with liver disorders.

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