

Article

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ACUTE KIDNEY INJURY IN A DOG DIAGNOSED WITH LEISHMANIASIS: CASE REPORT

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Abstract

A 3 years old, 40.8 kg, intact male American Bully, diagnosed with acute kidney injury in a private clinic in Serbia was referred for hemodialysis therapy. The dog was presented with the following symptoms: lethargy, appetite loss, vomiting, diarrhea, weight loss, dehydration (8-10%, Considerable loss of skin turgor), rectal temperature of 38.8°C and dry mucous membranes. Arterial blood pressure was elevated 218-220 mmHg systolic, using Doppler method. The biochemistry revealed elevated ALT 191 (RR: 10-118 U/L), AMY 1390 (RR: 200-1200 U/L), BUN 94 (RR: 7-25 mg/dL), CREA 3.6 (RR: 0.4-1.2 mg/dL), PHOS 9.8 (RR: 2.9-6.6 mg/dL), GLU 121 (RR: 60-110 mg/dL), K 3.3 (RR: 3.4-5.6 mmol/L). Urine analysis was performed with UPC 0.2-0.5 (borderline proteinuric), pH 5.5, microalbumin >25 mg/L, creatinine >26.4 mmol/L. The infestation with *Leishmania infantum* was confirmed using quantitative PCR. The patient was stabilized using fluid therapy and parenteral feeding. Hemodialysis was decided as an extracorporeal replacement therapy for sustaining renal function. A central venous catheter was placed under a light sedation with oxygen therapy. Hemodialysis was performed for three times in a period of 11 days.

A key treatment for acute kidney injury in canine patients is represented by intensive care, fluid therapy and hemodialysis therefore, the values were reduced in BUN from 94 mg/dL to 30 mg/dL and CRE from 3.6 mg/dL to 1.8 mg/dL. The BUN and CREA reached normal values 39 days after that the patient was discharged.

Key words: hemodialysis, canine, *Leishmania*, BUN, CREA
