

A CASE OF DECOMPENSATED CHRONIC RENAL FAILURE / ACUTE-ON-CHRONIC RENAL FAILURE IN A CAUCASIAN SHEPHERD

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The presenting case was a misinterpretation of the diagnosis of a case of decompensated chronic renal failure as an acute renal failure due to the similarity of manifestations in both conditions. Comparable situations could arise more frequently than anticipated in dogs. Acute renal failure and decompensated chronic renal failure can give a similar clinical picture and therefore may be subjected to misinterpretation and misdiagnosis. The objective of this presentation is to make the practitioners aware of the concept of acute-on-chronic renal failure.

Owners of "Rexy" (a 7 year old, female Caucasian Shepherd) returned home after a three-day pilgrimage to find their dog anorexic, lethargic, had developed a cough and had got worn out in appearance. "Rexy" later developed vomiting and was brought for treatment, the very next day.

Clinical examination on admission revealed tachycardia, dyspnoea, dehydration (8%), urineriferous breath, vomiting and abdominal pain. During the period of hospitalization it developed mucosal pallor, marked weakness, elevated capillary refilling time (CRT) and protracted vomiting followed by diarrhoea. Laboratory investigations revealed leukocytosis with neutrophilia, azotemia, proteinuria, haematuria, pyuria and minimally concentrated urine with an active urine sediment.

Based on clinical signs and laboratory findings, a diagnosis of acute renal failure (ARF) was made and relevant therapy implemented. The condition of Rexy deteriorated rapidly and died within 48 hours of hospitalization. Gross lesions (both renal and extra-renal) typical of chronic renal failure (CRF) were revealed on necropsy. Histopathology confirmed chronic interstitial nephritis.

Based on necropsy findings, it was finally concluded that an acute decompensation had superimposed over the pre-existent compensated CRF. This acute nature could be attributed to the psychological stress that the dog would have undergone as a result of the physical absence of the caring owner. The immediate cause of death would have been uraemic intoxication. The fact that clinical and laboratory findings of the acute decompensation were similar to those of ARF influenced our diagnosis of ARF, at that time.

Therefore it is important for practitioners to have an overall awareness of the different possible causes and outcomes, so that appropriate symptomatic and supportive treatment could be implemented during management of renal failure.