Abstract

The purpose of this study was to evaluate periodontal disease (PD) in dogs with chronic renal failure (CRF) and to compare it to PD in dogs with normal renal function (NRF). Twelve dogs with CRF and 24 dogs with NRF, all presenting dental pocket formation, were compared. In all dogs, serum creatinine, blood urea nitrogen, urine specific gravity and total red and white blood cells were determined. A complete oral examination was also performed including evaluation of bacterial plaque, gingivitis, gingival recession, pocket, calculus, dental mobility, dental loss, and ulcers. These data were used to calculate plaque index (PI), gingival index (GI) and periodontal destruction index (PDI). PD was graded as mild, moderate or severe based on the results. Mild, moderate or severe PD was observed in dogs with NRF, whereas dogs with CRF presented either mild or severe PD. Dogs with NRF showed higher involvement of the maxillary teeth, whereas dogs with CRF showed a higher involvement of the mandibular teeth. Plaque index was significantly higher in dogs with NRF. It was concluded that lesion distribution and periodontal disease progression may be altered in dogs with CRF, and gingival inflammatory response differs in dogs with NRF and CRF regarding to the stage of periodontal disease.

Keywords

periodontal disease, chronic renal failure, dogs.