Acute Renal Failure in Dogs after the Ingestion of Grapes or Raisins: A Retrospective Evaluation of 43 Dogs
Source: American Society for the Prevention of Cruelty to Animals (ASPCA) Animal Poison Control Center, Urbana, IL, USA

A review of records from the AnTox database of the American Society for the Prevention of Cruelty to Animals Animal Poison Control Center identified 43 dogs that developed increased blood urea nitrogen concentration, serum creatinine concentration, or both as well as clinical signs after ingesting grapes, raisins, or both. Clinical findings, laboratory findings, histopathological findings, treatments performed, and outcome were evaluated. All dogs vomited, and lethargy, anorexia, and diarrhea were other common clinical signs. Decreased urine output, ataxia, or weakness were associated with a negative outcome. High calcium x phosphorus product (Ca x P), hyperphosphatemia, and hypercalcemia were present in 95%, 90%, and 62% of the dogs in which these variables were evaluated. Extremely high initial total calcium concentration, peak total calcium concentration, initial Ca x P, and peak Ca x P were negative prognostic indicators. Proximal renal tubular necrosis was the most consistent finding in dogs for which histopathology was evaluated. Fifty-three percent of the 43 dogs survived, with 15 of these 23 having a complete resolution of clinical signs and azotemia. Although the mechanism of renal injury from grapes and raisins remains unclear, the findings of this study contribute to an understanding of the clinical course of acute renal failure that can occur after ingestion of grapes or raisins in dogs.