Clinical evaluation of dietary modification for treatment of spontaneous chronic renal failure in dogs.

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OBJECTIVE: To determine whether a diet used for dogs with renal failure (renal food [RF]) was superior to an adult maintenance food (MF) in minimizing uremic crises and mortality rate in dogs with spontaneous chronic renal failure. DESIGN: Double-masked, randomized, controlled clinical trial. ANIMALS: 38 dogs with spontaneous chronic renal failure. PROCEDURE: Dogs were randomly assigned to a group fed adult MF or a group fed RF and evaluated for up to 24 months. The 2 groups were of similar clinical, biochemical, and hematologic status. The effects of diets on uremic crises and mortality rate were compared. Changes in renal function were evaluated by use of serial evaluation of serum creatinine concentrations and reciprocal of serum creatinine concentrations. RESULTS: Compared with the MF, the RF had a beneficial effect regarding uremic crises and mortality rate in dogs with mild and moderate renal failure. Dogs fed the RF had a slower decline in renal function, compared with dogs fed the MF. CONCLUSIONS AND CLINICAL RELEVANCE: Dietary modifications are beneficial in minimizing extrarenal manifestations of uremia and mortality rate in dogs with mild and moderate spontaneous chronic renal failure. Results are consistent with the hypothesis that delay in development of uremic crises and associated mortality rate in dogs fed RF was associated, at least in part, with reduction in rate of progression of renal failure.