

Fluid Therapy for Dogs with Acute Kidney Injury Study

Purpose of Study

The kidneys are responsible for eliminating appropriate amounts of sodium and water from the body; however, kidney function is compromised with an acute kidney injury (AKI). Intravenous fluids are commonly used to treat AKI, but the ideal sodium content of the fluid is not known. The purpose of this study is to evaluate the effects of two different types of intravenous fluids on the body's fluid volume status in dogs with AKI.

Eligibility

Inclusion criteria:

- Dogs with a clinical diagnosis of AKI
- ≥1 year of age
- ≥5 kg body weight
- Intention to be hospitalized at Kansas State University Veterinary Health Center for treatment of AKI for at least 48 hours

Exclusion criteria:

- Intravenous fluid therapy received within 48 hours prior to enrollment
- Significantly high blood sodium (>155 mmol/L) or low sodium (<140 mmol/L) concentrations

What does participation in this study involve?

Dogs with AKI who are being hospitalized at Kansas State University Veterinary Health Center for treatment of AKI at the recommendation of the primary clinician on the case are eligible. Blood and urine (<1 tablespoon of each) are collected for a chemistry panel, NT-proBNP, aldosterone, and osmolality testing prior to starting fluid therapy. An ultrasound to evaluate the kidneys will also be performed. Study participants will then be randomized to receive either a fluid with the standard amount of sodium in it or a fluid with a lower sodium content. The type of fluid will not be revealed to both owners and clinicians. After 48 hours of fluid therapy, blood and urine will be collected again for the same diagnostic tests (except renal panel instead of a full chemistry panel), and the kidneys will be rechecked with an ultrasound.

Client Compensation

This study will cover the cost of the diagnostics listed above as well as the cost of the fluids. Clients are responsible for all other costs that are recommended by your dog's clinician.

Client Responsibilities

Your dog is being considered for enrollment in this study because hospitalization for at least 48 hours at Kansas State University Veterinary Health Center is anticipated as treatment for your dog's AKI. No rechecks or follow up is required for this clinical trial.

Contact Information

Please contact Kris Richardson, Clinical Trials Coordinator at the Veterinary Health Center, for more information about this study. Phone: (785)-532-3046; email: ClinicalTrials@vet.k-state.edu