Veterinary Health Center
AT KANSAS STATE UNIVERSITY
TO DISCOVER. TO TEACH. TO HEAL.

The ability of abdominal ultrasound to predict the feasibility of intestinal foreign body removal to be performed laparoscopic-assisted in dogs.

Study Purpose: This purpose of this study is to determine the accuracy of abdominal ultrasound in determining the suitability of a patient to undergo intestinal foreign body removal laparoscopic-assisted. The study will also determine the feasibility of laparoscopic-assisted surgery to treat an intestinal foreign body in areas that have not previously been attempted laparoscopic-assisted.

Clinical Protocol: Clinical patients will be presented to the Kansas State University Veterinary Health Center. Initial diagnostics (i.e. CBC, chemistry, abdominal radiographs) will be at the discretion of the primary clinician. Upon diagnosis of a suspected intestinal foreign body, and as part of this clinical trial, an abdominal ultrasound under mild sedation will be performed by a board certified radiologist or a radiology resident under the direct supervision of a boarded individual. Following the ultrasound examination, the performing individual will make a recommendation for whether or not the surgery can successfully be performed laparoscopic-assisted based on specified criteria. Patients that meet study eligibility will then undergo a laparoscopic-assisted surgery to remove the foreign body. The only exception will be septic patients where an open laparotomy will be performed. After surgery, a minimum of 2 week follow up will be recorded.

In this study, an abdominal ultrasound will be performed for dogs diagnosed with an intestinal foreign body, regardless of confidence in the diagnosis from abdominal radiography. There is well-documented evidence that performing laparoscopic-assisted surgery is of benefit to the patient as it reduces post-operative morbidity, reduces the need for rescue analgesics, and allows for improved visualization of intra-abdominal structures. In addition, the need to convert to open laparotomy after an attempted laparoscopic-assisted procedure leads to increased surgical and anesthetic time. Therefore, an abdominal ultrasound performed prior to surgery with the intention of increasing the accuracy of patient selection for laparoscopic-assisted procedures, and reducing the need to convert to open laparotomy at the time of surgery, will be of benefit to the patient.

Anesthetic and analgesic protocols will be at the discretion of the attending anesthesiologist, and will be tailored specifically to each patient.

Patients undergoing laparoscopic-assisted surgery will have only a single incision on their abdomen that will accommodate the laparoscopic camera and instruments. After initial explore of the abdomen, the laparoscopic port and instruments will be removed, and a wound retractor device will be placed in the incision to protect the intestines from coming into contact with the body wall. A portion of the intestine will be exteriorized through the incision to allow evaluation of the entire intestinal tract. The foreign body will be removed through this incision in the same manner as would be performed through an open laparotomy. If the foreign body is unable to be

exteriorized, the surgery will be converted to an open laparotomy. This would require extending the incision the length of the abdomen.

Investigators:
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Eligibility: To be eligible for inclusion in this study each dog must be diagnosed with either a small intestinal foreign body based on abdominal radiography, be an adequate anesthetic candidate based on blood work results and have no overt concerns for sepsis. For clinical trial participation, an abdominal ultrasound will be performed prior to surgery as part of the study, and for pre-operative planning. Additionally, each dog must weigh at least 15 kilograms.

Risks: While uncommon, there are risks to sedation in dogs. These include reactions to the anesthetic drugs, low blood pressure, aspiration pneumonia, and death. Close monitoring will be performed for the entirety of the sedation and during the immediate recovery period. Additionally, risks of laparoscopic-assisted surgery are similar as those for open laparotomy and include bleeding, incision site infections, and reactions to anesthetic drugs, low blood pressure, aspiration pneumonia, need for conversion to open laparotomy, increased surgical time, and death.

Fees for Services: Study funds will cover the cost of the pre-operative abdominal ultrasound and the laparoscopic equipment. Additionally, study funds will discount the overall cost by $500 after covering the cost of the abdominal ultrasound and laparoscopic equipment. After these discounts, the client will be responsible for the remaining balance.

Owner Responsibilities: The owner will be responsible for following up with a re-check appointment in 2 weeks following surgery. This can be performed at the KSU VHC or with their primary care veterinarian. If performed with the primary care veterinarian, the contact information of the clinic should be made available to the study investigators.

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