

Practical & Cost-Effective Approach to Chronic Diarrhea in Dogs



INVESTIGATORS

Drs. Christine Bryan, Jeb Cade, Alyssa Sullivant, and Andrew Mackin

The Mississippi State University College of Veterinary Medicine is pleased to announce an exciting new research initiative designed to develop more practical and cost-effective methods of managing chronic diarrhea in dogs. The goal of the initiative is to work in cooperation with our local practitioners to develop solid, cost-effective and evidence-based protocols for diagnosing and treating chronic diarrhea in dogs. These protocols are designed to be affordable for most pet owners and, wherever possible, to reduce the need for costly or invasive referral-level diagnostic and therapeutic interventions. We plan to recruit a large number of cases (**up to 50 dogs**) in a short period of time and, in order to encourage owner participation, the costs of diagnosing and treating dogs with chronic diarrhea will be covered by the project. We would greatly appreciate the help of our local practitioners with this exciting project.



STUDY DETAILS

We will be investigating chronic diarrhea in dogs. As we know from practical experience, many dogs with diarrhea are cured with simple diagnostic testing and empirical treatment that do not require referral for additional diagnostics and treatment. However, there are currently no established evidence-based protocols for treatment of affected dogs. Our ultimate goal with this project is to establish effective protocols for treating these patients.

INITIAL STUDY

To help recruit dogs that are suffering from chronic diarrhea, which is defined as diarrhea lasting for more than two weeks, we are seeking help from general practitioners who regularly refer cases to the Mississippi State University College of Veterinary Medicine or, for those cases that do not require referral, regularly call us for advice.

To assist the veterinarian and owner in working up these patients, funding of \$300 will be provided to the referring veterinarian at the time of enrolment of the case, in order to subsidize diagnostic and therapeutic management. We anticipate that most typical cases will not require referral to MSU-CVM, and that the management of the patient will be covered in entirety at the veterinarian's own practice.

At the time of enrolment, consultations will be provided by the principal investigators on the project, Drs. Bryan, Cade, Sullivant and Mackin, to the local practitioner who is the primary care veterinarian on the case. Consultations consisting of conversations in the form of phone calls, emails, text messages, faxes and, occasionally if requested, practice visits, will be used to obtain a thorough history and discuss physical exam findings, as well as to develop an effective and structured "cost-effective" diagnostic and treatment plan. Diagnostic and treatment protocols will be individualized to the patient, but may include:

- Diagnostic tests including fecal flotation, fecal cytology, fecal culture, rectal scrapings and fecal assays for infectious organisms.
- Therapeutic trials including food trials, parasiticides, antibiotic trials with drugs such as tylosin and metronidazole, and pre- and pro-biotics.

Follow-up conversations will occur for at least 3 months following onset of management in order to determine the effectiveness of the chosen treatment plan. Prior to, and then monthly over the follow-up period, simple outcome surveys will

care veterinarians using established tools such as standardized fecal consistency scores. Treatment success will be defined by the primary end point of normal fecal consistency scores for at least one month following completion of the treatment period.

FOLLOW-UP STUDY

For those patients enrolled in the initial study that do not improve with our in-practice treatment protocols (an anticipated 10-20% of enrolled dogs), subsidized referral to Drs. Sullivant and Mackin in the MSU-CVM Small Animal Internal Medicine service will be provided. Referral will include **subsidization (maximum of \$3,500)** of referral-level diagnostics and treatment through MSU-CVM.

Diagnostic and therapeutic protocols will be specific to the patient, but may include:

- Diagnostic tests including complete blood count, biochemistry, abdominal radiography and ultrasonography, gastrointestinal panels (folate and cobalamin levels), and gastrointestinal biopsy via endoscopy, laparoscopy or, rarely, exploratory laparotomy.
- Targeted therapy based on final diagnosis, including aggressive immunosuppression for inflammatory bowel disease, antifungal drugs for histoplasmosis, chemotherapy for lymphosarcoma, and supplementation for cobalamin deficiency.

LONG TERM GOALS

The long-term goals of our study are to obtain measurable outcomes that will establish the utility of cost-effective in-practice protocols for treating chronic diarrhea in dogs, establish how often referral for specialist-level management is indicated, and produce evidence-based affordable protocols for use by general practitioners. We hope that the results of our study will be of significant benefit to veterinarians and pet owners struggling to affordably manage chronic diarrhea in dogs.

In the meantime, the immediate short-term benefit for the local dogs, pet owners and referring veterinarians enrolled in our project is the generous subsidization of a comprehensive diagnostic and therapeutic plan for managing chronic diarrhea, including referral if needed. We also hope to forge stronger collaborative and consultative links between MSU-CVM and our local veterinarians.

We look forward to the opportunity to work with you on this exciting endeavor!

Please feel free to contact any of the principal investigators (Drs. Bryan, Cade, Sullivant, or Mackin) by telephone (MSU-CVM referral coordinator, 662-325-1351), cell phone, text or email with questions or concerns, or if you are interested in participating in this study.

CONTACT

Dr. Christine Bryan (MSU, 2006); Community Veterinary Services; 662-312-0866;
Bryan@cvm.msstate.edu

Dr. Jeb Cade (MSU, 2006); Community Veterinary Services; 601-720-0148;
JCade@cvm.msstate.edu

Dr. Alyssa Sullivant (MSU, 2007); Small Animal Internal Medicine; 662-487-5115;
ASullivant@cvm.msstate.edu

Dr. Andrew Mackin (Murdoch, 1983); Small Animal Internal Medicine; 662-418-3277;
mackin@cvm.msstate.edu

