



Cairo University

Cairo University
Faculty of Veterinary Medicine
Department of Medicine and Infectious Diseases



Diagnostic and Therapeutic Studies on Gastro-Enteritis in Dogs

Thesis presented by

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(B.V.Sc. 2007, Faculty of Veterinary Medicine, Beni-suef University)

(For the Master's degree in Internal medicine)

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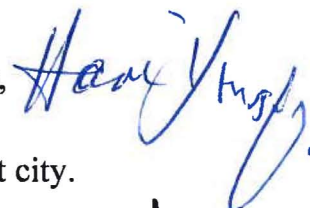
**“Diagnostic and therapeutic studies on Gastro-
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SUPERVISION SHEET

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Abstract

The present study was conducted to evaluate the therapeutic effect of commercial lactobacillus-based probiotic as a single therapeutic agent against acute diarrhea in dogs without the use of antibiotic or other antimicrobials. 47 dogs were studied in the present work, included 20 apparent healthy dogs (control group) and 27 diseased dogs suffered from acute uncomplicated diarrhea. About 17 diarrheic dogs were treated with probiotic and 10 diarrheic dogs with antibiotics (amoxicillin clavulanic acid and metronidazole) for 5 days. Physical and clinical examinations were performed on all dogs. Blood and serum samples were collected to evaluate hemato-biochemical status at Day 0 and Day 5 after treatment. Stool was observed and scrutinized for its consistency during treatment. Results concerning diarrheic dogs revealed significant increase in PCV and TLC and significant decrease in total protein, albumin and globulin and significant increase in ALT, AST and bilirubin. Probiotic treated dogs showed significant decrease of PCV and WBCs count, significant increase total protein, albumin, and A/G ratio, significant decrease of elevated ALT, AST and bilirubin at Day 5 compared to diarrheic dogs at day 0. Results showed significant decrease in recovery time of diseased cases treated with probiotic at 2.4 ± 0.02 days in comparison to conventionally treated cases with antibiotic at 4.4 ± 0.7 days, no significant variation between both groups in hematological profile, however in biochemical parameters there were significant decrease in AST in probiotic treated group and significant decrease in ALT in antibiotic treated cases.

Conclusion; the data indicated an efficient treatment with lactobacillus-based probiotic as a sole therapeutic agent against canine acute uncomplicated diarrhea without the need for antibiotics, it did not only reduce the recovery time, but also, enhance liver functions and improve fecal consistency.

Keywords: Lactobacillus- Probiotics, Acute Diarrhea, antibiotic, Dogs, CBC, Biochemistry

DEDICATION

To my dear mother and father, who always encouraged and supported me and to my brother and sisters and their children, I love to dedicate this work to all of you.

*Close friends Drs. Mohamed Fouda and
Doaa Shehata*

*Colleges Drs. Ahmed Fathy, Amany
Moghazy and Mervet Atallah*

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