

UTILITY OF ULTRASOUND FOR THE DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE AND INTESTINAL LYMPHOMA IN CATS

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INTRODUCTION

Inflammatory Bowel Disease (IBD) and intestinal lymphoma (IL) are the primary causes of chronic enteropathy in cats. Both conditions present a similar clinical picture with symptoms such as vomiting, diarrhea, weight loss, and reduced appetite. Among the diagnostic methods, ultrasonography is shown as a useful, non-invasive method widely used to detect abdominal pathologies in cats.

OBJECTIVES

The aim of this study is firstly to conduct a literature review of ultrasound findings in IBD and intestinal lymphoma. Secondly, it seeks to gather information on additional diagnostic tests that can confirm ultrasound diagnoses, as both conditions share similar ultrasonographic features. The study focuses on enhancing understanding of these findings to optimize the diagnosis and treatment of these disorders in cats.

IBD

- Cell type
- Type of inflammation

LYMPHOMA

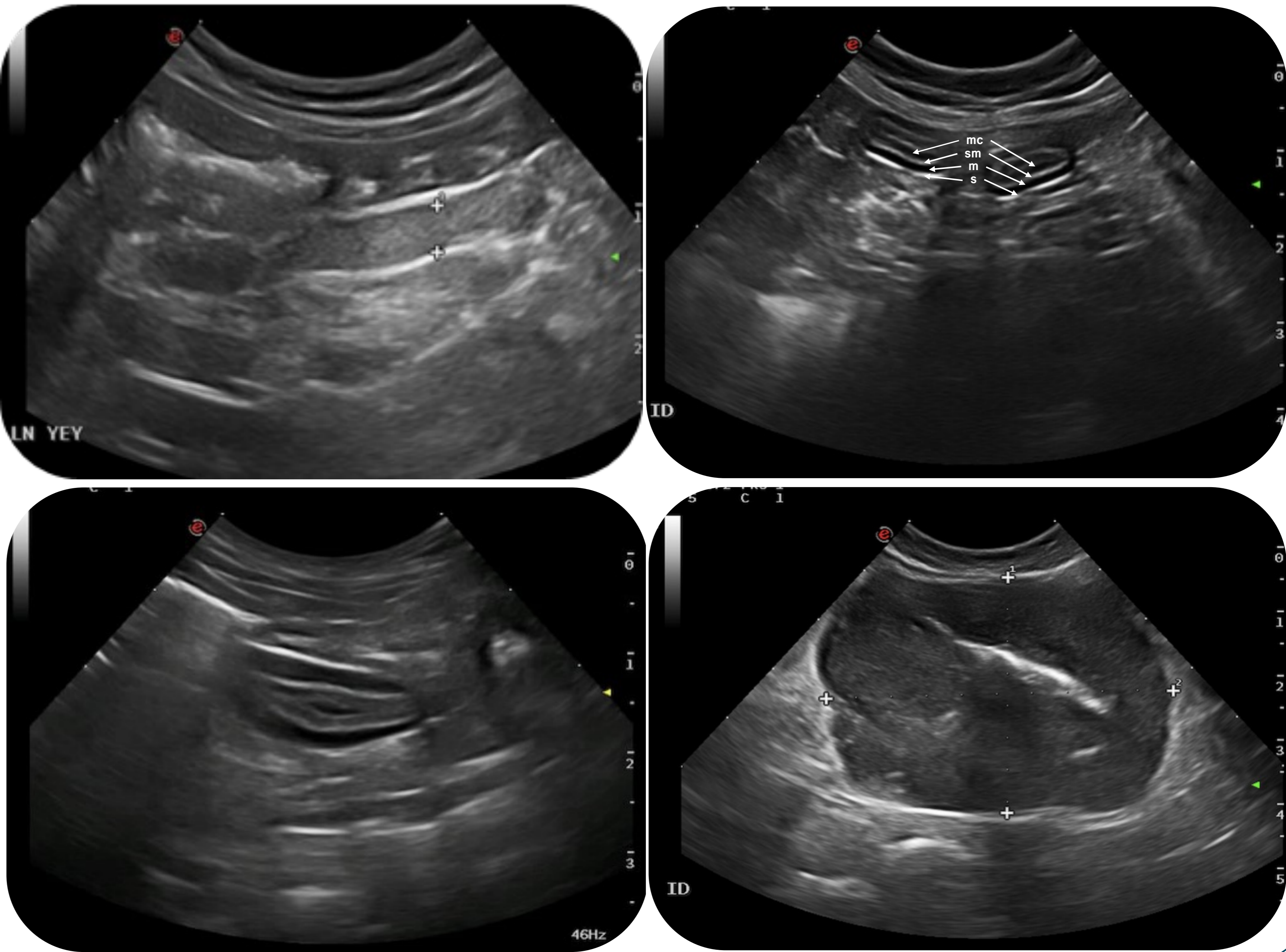
- Low-grade lymphoma // mucosal lymphoma
- High-grade lymphoma // transmural lymphoma
- Large granular lymphocytic lymphoma

ULTRASOUND FINDINGS OF IBD

- Muscle/Submucosa ratio > 1
- Diffuse circumferential thickening of the muscular layer of the small intestine
- Loss of stratification of the intestinal wall layers and low echogenicity
- Abdominal lymphadenopathy

ULTRASOUND FINDINGS OF INTESTINAL LYMPHOMA

- Significant thickening of the muscularis propria and the total intestinal wall in the duodenum and jejunum
- Muscle/Submucosa ratio > 1
- Abdominal lymphadenopathy, significantly thicker lymph nodes.
- Transmural and hypoechoic masses with disrupted layering either symmetrical or asymmetrical
- Effect on nearby tissue: visible regional lymphadenopathy as hypoechoic nodes in fat or abdominal effusion



CONCLUSIONS

- 1 The mucosa is the thickest layer
- 2 Measurement from the serosal interface to the luminal side of the mucosa
- 3 In IBD and lymphoma, the muscle/submucosa ratio > 1
- 4 High intermediate LI: transmural and hypoechoic intestinal masses, loss of stratification and peristalsis
- 5 In LI, the presence of focal or multifocal masses in the intestinal wall
- 6 Lymphadenopathy is visible sonographically in IBD and lymphoma
- 7 IBD and IL have similar ultrasound findings; complementary tests are necessary
- 8 Histopathology allows differentiation between IBD and LI
- 9 PCR + histomorphology + immunophenotyping for a definitive diagnosis of lymphoma

DIAGNOSTIC TESTS

Clinical and laboratory examination

Histomorphology, immunophenotyping and PCR

Biopsy

Histopathology and immunohistochemistry

Coprological examination