## DUODENAL STRONGYLOIDIASIS: HISTOPATHOLOGICAL REPORT OF 2 CASES



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# INTRODUCTION

Strongyloides stercoralis is a parasitic nematode that infects humans through contact with contaminated soil, primarily affecting the gastrointestinal tract, mainly in tropical and subtropical countries. Presentation varies from mild GI symptoms to severe complications(Hyperinfection and disseminated form of strongyloidiasis). This poster discusses two cases where patients presented with unusual manifestations of strongyloidiasis, highlighting the , histopathological findings, and diagnostic procedures involved in early treatment of the patients.

## CASE REPORTS



C/o:

recurrent vomitus and fullness postprandially, belching sensation and difficulty passing stools Clinical DDs: Gastritis, Sprue, H.Pylori Infection

#### **D2** Biopsy:

1.Crypts containing intraluminal eggs (Fig 1(a)) and larval forms of S.Stercoralis(Fig1(b)), 2.Neutrophilic and lymphocytic infiltration of lamina propria, no dysplasia

### Gastric biopsy:

1.Occasional cryptitis,

2.No H.pylori, intestinal metaplasia, atrophy, dysplasia, or malignancy

*Final diagnosis:* Chronic active duodenitis with duodenal Strongyloides infection



C/o:

crampy abdominal pain, loss of appetite, blood in stools

### D2 biopsy:

1.Mucosal preserved architecture with focal villous blunting,crypts exhibited eosinophilic ova, larvae,(Fig 2(a, b)) and adult stages of S.stercoralis, occasional cryptitis,

2.Glandular epithelium exhibited variable reactive atypia

### **Gastric biopsy:**

1. Corporal glands with superficial lymphoplasmacytic proliferation, mild H. pylori colonization,

2. No neutrophilic activity, intestinal metaplasia, dysplasia, or malignancy

Final diagnosis::Duodenal Strongyloidiasis with H.pylori associated superficial gastritis



Fig:1(a)

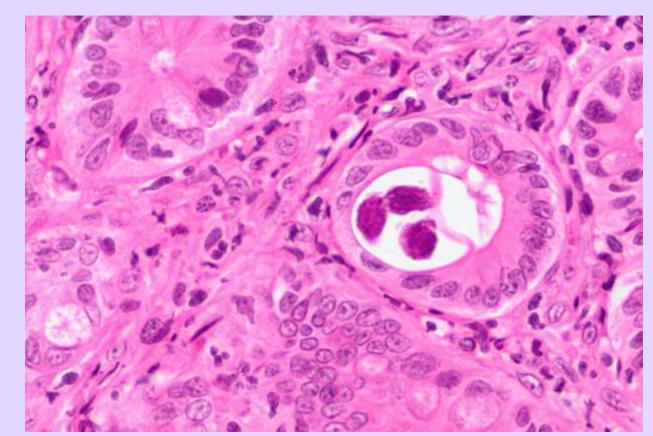


Fig:1(b)

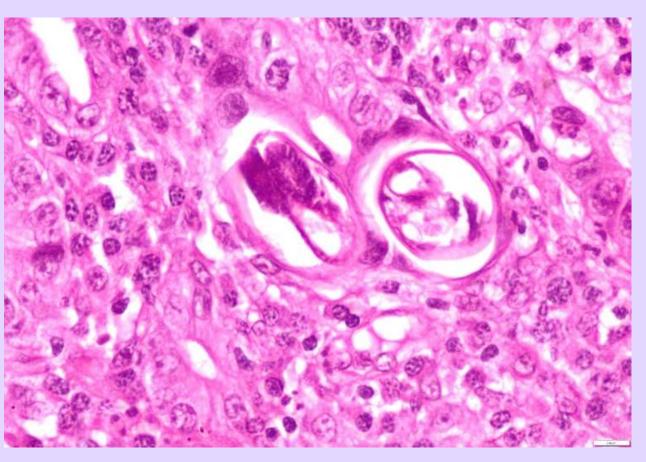


Fig:2(a)

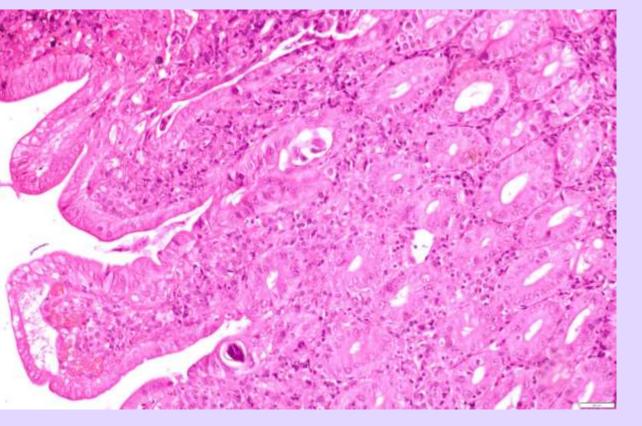


Fig:2(b)

# MANAGEMENT

- Definitive anti-helminthic treatment with Ivermectin & Albendazole for 2 weeks gives definitive results in immunocompetent individuals.
- Additional antibacterial agents Amoxicillin and Clarithromycin for H.pylori management.

# DISCUSSION

- *S.strecoralis*; being an ovo-viviparous parasite, it's eggs are not detected with diagnostic methods designed to detect nematode eggs.
- >50% stool samples turn negative for eggs but larvae are detected occasionally.
- Histology samples rarely aid in diagnosis of Strongyloides cases
- Both cases presented with symptoms which pointed clinical suspicion towards causes for GERD.
- Highlights concurrent presence of *S. stercoralis* and *H. pylori* infection simultaneously in a patient; a very rare presenation in existing literature.
- *H.pylori* associated gastritis further complicated the management.
- Early diagnosis prevented hyperinfection syndrome, despite patients having prepondence to developing it due to age ,comorbidities & other ailments.
- Regular follow up is essential to determine prognosis in these patients.

# CONCLUSION

- Biopsy provided the diagnosis of the infection by Strongyloides
- Highlights importance of tissue sampling in patients presenting with non-specific gastrointestinal symptoms
- Early diagnosis can prevent opportunistic infections because of immunocompromised state in hyperinfection syndrome.
- Tailored treatment could be catered due to definitive diagnosis from histology reports

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