



A Long and Dangerous Infection

A Case of Whipple's Disease with Concomitant Esophageal Candidiasis and *H. Pylori* Infection

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CASE PRESENTATION

- 36-year-old male presented with a three-month history of watery diarrhea, weight loss, and migratory polyarthralgia.
- Infectious, metabolic, and cross-sectional imaging evaluations were unremarkable.
- EGD and colonoscopy were performed.
- Biopsies of the esophagus revealed esophageal candidiasis (**Figure 1**) and biopsies of the stomach revealed *H. pylori* infection.
- Duodenum evaluation revealed dilated lacteals with blunted villi (**Figure 2**). Similar findings were appreciated in the terminal ileum (TI).
- Biopsies of the duodenum, TI, and colon revealed foamy macrophages that stained PAS positive concerning for Whipple's Disease (**Figure 3**). *Tropheryma whippelii* DNA PCR was positive.
- An LP and TTE were performed which ruled out CNS and cardiac involvement.

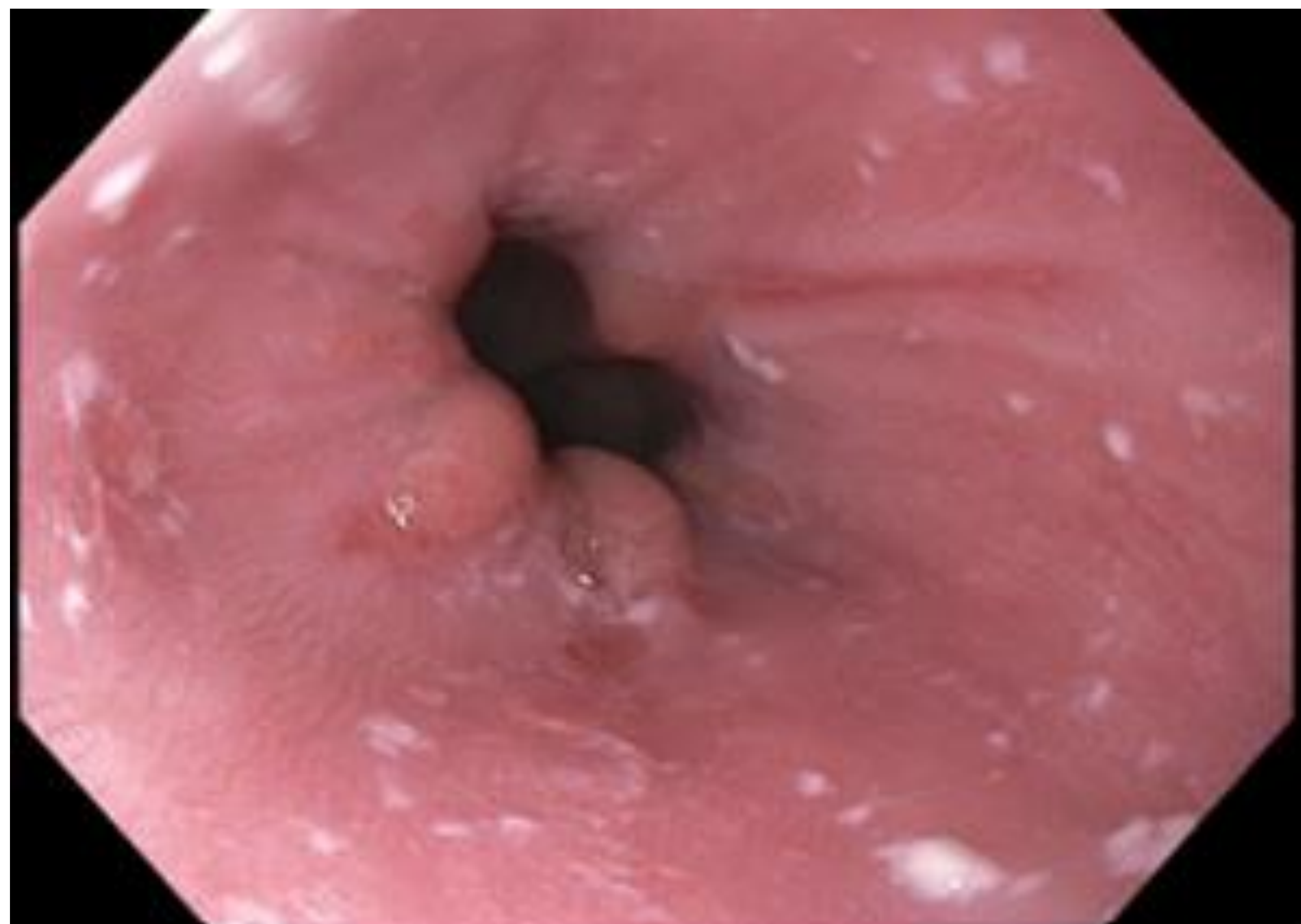


Figure 1. Esophageal Candidiasis



Figure 2. Dilated lacteals with blunted villi, duodenum

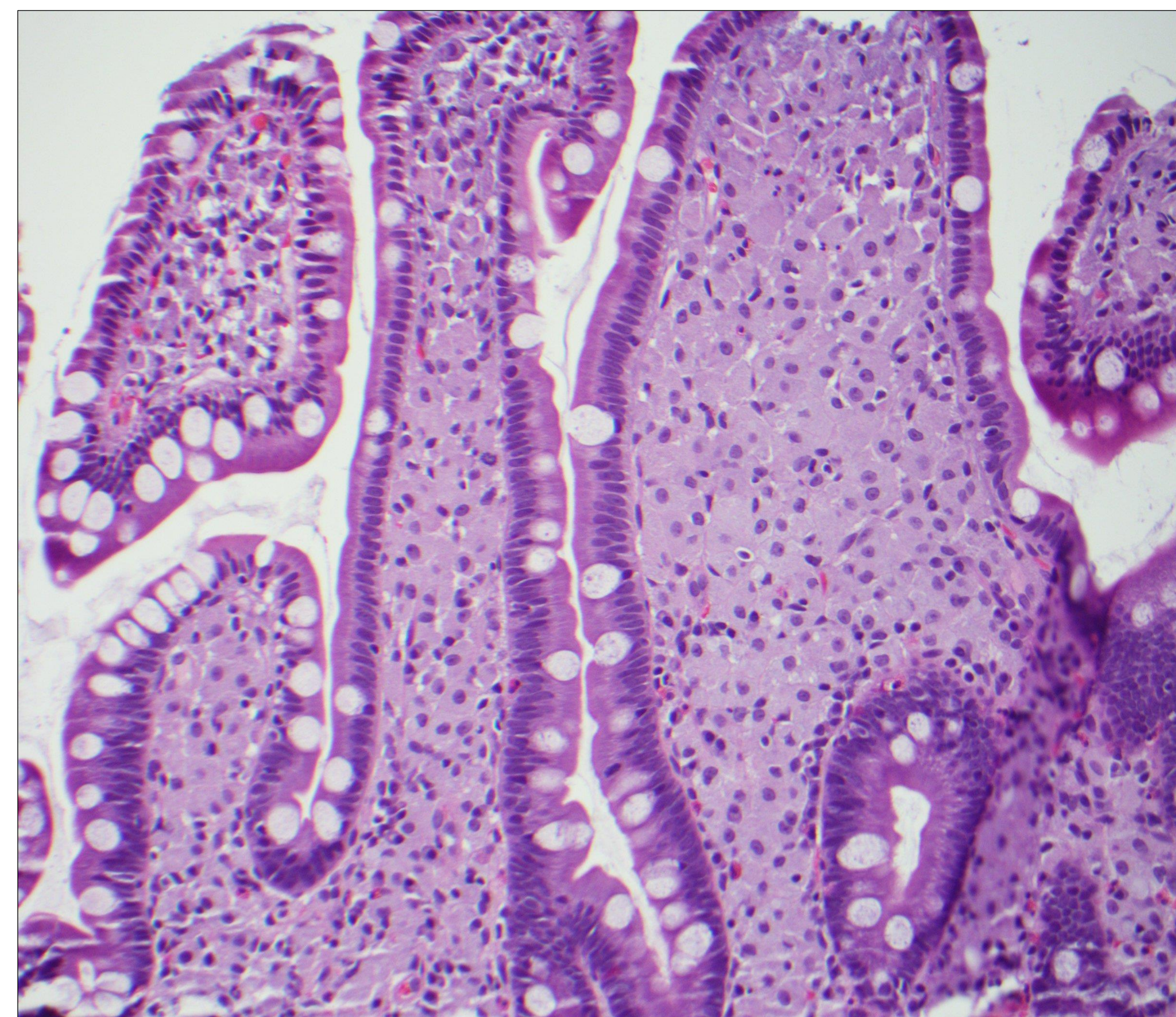


Figure 3. Foamy macrophages in the lamina propria, duodenum (20X)

DISCUSSION

- Whipple's disease is a rare infection caused by *Tropheryma whippelii*, a gram-positive bacillus that is ubiquitous in the environment. Only 12 new cases are reported per year world-wide.
- *T. whippelii* can spread to the lymphatics, heart, CNS, and joint tissues leading to an array of complications, as well as chronic immunosuppression.
- He was initially treated with intravenous ceftriaxone for Whipple's disease for two weeks then oral hydroxychloroquine and doxycycline for one year. Fluconazole was given for candidiasis and bismuth-based quadruple therapy for *H. pylori*.
- Esophageal candidiasis usually occurs in setting of immunocompromise. Our patient's candidiasis likely occurred from chronic immune dysfunction associated with *T. whippelii* infection.
- After 3 months, his symptoms resolved and he regained 30 lbs. On repeat endoscopy one year later, foamy macrophages persisted.
- A common practice pattern is performing EGD every year for three years. The clinical significance of histologic evidence of infection in asymptomatic patients after antibiotics is obscure.

CONCLUSION

- Whipple's disease is a rare condition that presents a diagnostic challenge, often resulting in severe multisystem involvement and immunocompromise.
- Treatment can be particularly challenging in the setting of other concomitant infections.
- Early multidisciplinary teamwork is essential in establishing the diagnosis and initiating treatment.

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