

Collagenous Gastritis and SSRI Use: A Potential Pharmacologic Link to a Zebra Diagnosis

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Introduction

- Collagenous gastritis (CG) is a rare disease primarily affecting the digestive system
- Characterized by thick subepithelial collagen bands (>10 μm) associated with an inflammatory infiltrate of gastric mucosa
- <100 reported cases since first reported case in 1989
- No established etiology and no standard therapy exists based on RCTs

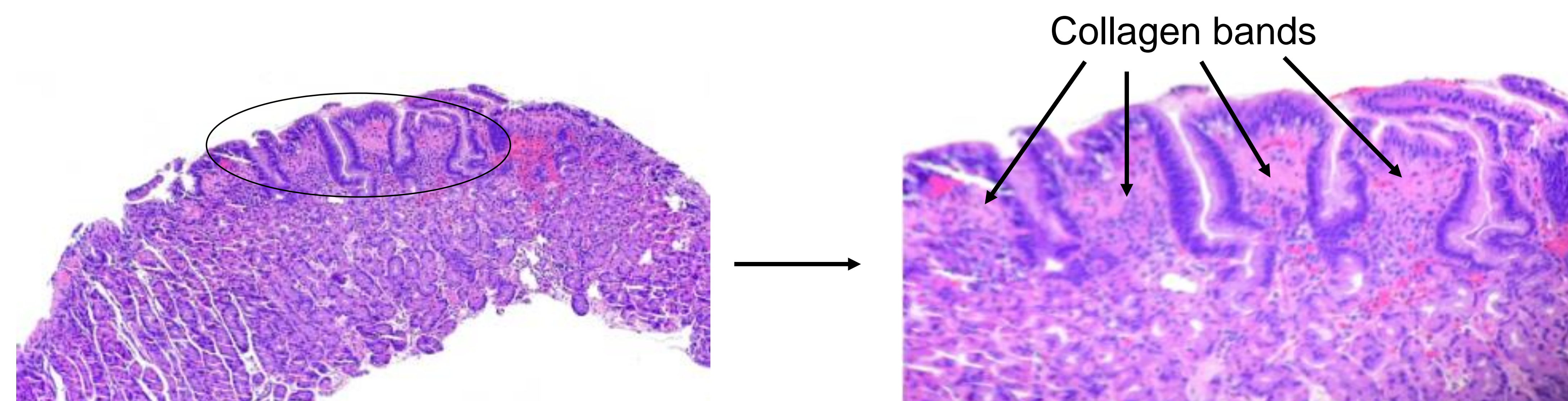
Case Description

- 25 year old woman with PMH of generalized anxiety disorder on longstanding Sertraline
- Reported months of abdominal discomfort, frequent eructation, nausea, and bloating
- Normal physical exam, upper endoscopy, and duodenal biopsies
- Gastric biopsies demonstrated CG
- Histologic diagnosis confirmed at Cleveland Clinic

Can SSRIs inhibit the regulation of proinflammatory cytokines and increase the risk of collagenous gastritis?



Endoscopic images of patient's stomach: A. cardia B. fundus C. antrum



Gastric biopsy slides of patient

Discussion

- We propose that the development of this patient's CG was mediated by her use of Sertraline, perhaps through downregulation of TNF-alpha and IL-6, known proinflammatory cytokines
- Further studies are needed to test this hypothesis
- The ability of antidepressants to affect the immune system in various ways has been studied extensively
- One meta-analysis published in 2015 suggested that serum levels of TNF-alpha and IL-6 significantly decreased while no significant change in CRP concentration before and after treatment was observed
- Another meta-analysis of 22 studies showed that the level of IL1-Beta in patients' serum significantly decreased, IL-6 slightly decreased, and TNF-alpha levels did not change regardless of medication taken (SSRI, SNRI, or TCA)