

Black Speckled Villi

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Introduction

- Pseudomelanosis duodeni is a rare endoscopic finding characterized by brownish black pigmentation seen primarily in the first and second segments of the small bowel.
- It has been associated with certain medications including iron supplementation and antihypertensives in addition to chronic medical conditions such as kidney disease and diabetes mellitus.



Figures: Upper Endoscopy demonstrates diffuse speckled pattern throughout duodenal bulb

Case Presentation

49 year-old man with a history of obesity (BMI 40), obstructive sleep apnea, type 2 diabetes, atrial fibrillation and flutter with a watchman was referred to our clinic for evaluation of rectal bleeding.

History

- He reports several episodes of bright red blood per rectum. Otherwise two bowel movements daily, normal stools, and reports no abdominal pain. He has had no prior upper or lower endoscopies.

Home medications

- Takes iron supplementation for iron deficiency anemia and endorses chronic heart burn and GERD for which he takes famotidine.
- Additionally, amlodipine, aspirin, atorvastatin, carvedilol, furosemide, hydralazine, isosorbide mononitrate, Lantus and losartan.

Endoscopy

- Upper endoscopy was performed for the indication of hematochezia and iron deficiency anemia.
- EGD demonstrated diffuse mucosal changes characterized by tiny discrete brown-black patchy discoloration in the duodenal bulb.

Discussion

Duodenal pseudomelanosis is a rare but benign finding.

- Unknown etiology, but likely due to iron sulfide and hemosiderin deposition within the macrophage lysosomes of the duodenal lamina propria.
- It is associated with common chronic medical conditions including iron deficiency anemia, hypertension, diabetes, chronic kidney disease and therefore common medications such as iron supplementation, hydralazine, beta blockers and diuretics.
- Most patients taking oral iron, antihypertensives or with chronic co-morbidities do not demonstrate these findings.
- Endoscopists have to be aware of the appearance of pseudomelanosis since this distinct rare entity is a benign condition.

References

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