

HCA Healthcare

Scholarly Commons

Internal Medicine

Research & Publications

2-6-2020

Bradycardia in the Setting of Gastric Sarcoidosis

Kameron Black MPH

Michelle Levine DO

HCA Healthcare, Michelle.Levine@HealthONECares.com

Rage Geringer MD

HCA Healthcare, Rage.Geringer@HealthONECares.com

Gregory Hicks MD

HCA Healthcare, gregory.hicks2@healthonecares.com

Oliwier Dziadkowiec

HCA Healthcare, oliwier.dziadkowiec@hcahealthcare.com

Follow this and additional works at: <https://scholarlycommons.hcahealthcare.com/internal-medicine>



Part of the [Gastroenterology Commons](#), [Hemic and Lymphatic Diseases Commons](#), [Internal Medicine Commons](#), and the [Pathological Conditions, Signs and Symptoms Commons](#)

Recommended Citation

Black K, Levine M, Geringer R, Hicks G, Dziadkowiec O. Bradycardia in the setting of gastric stenosis. Poster presented at: ACP Colorado Chapter Meeting; February 6-8, 2020; Colorado Springs, CO.

This Poster is brought to you for free and open access by the Research & Publications at Scholarly Commons. It has been accepted for inclusion in Internal Medicine by an authorized administrator of Scholarly Commons.



Bradycardia in the Setting of Gastric Sarcoidosis

Kameron Black, MPH. Michelle Levine, DO. Rage Geringer, MD. Gregory Hicks, MD., Oliwier Dziadkowiec, MD| HCA

Introduction

Sarcoidosis is a systemic granulomatous disease of unknown etiology characterized by granuloma formation. Gastrointestinal involvement is a rare manifestation of the disease that is usually clinically silent.¹ When symptoms do present, they include diminished peristalsis, postprandial epigastric pain, nausea, vomiting, hematemesis, anorexia and heartburn.² While gastric involvement is the most common presentation of sarcoidosis in the gastrointestinal tract, symptomatic involvement occurs in less than 1% of cases.² However, gastric granulomas have been seen in up to 10% of patients with pulmonary sarcoidosis.³

Case Report

A 35-year-old Caucasian woman with a medical history of Systemic Lupus Erythematosus (SLE), Sjogren's syndrome, gastrosarcoidosis s/p jejunostomy tube placement and gastric pacemaker, gastritis, gastroparesis, rheumatoid arthritis and mood disorder was admitted to our hospital for palpitations and sensation of heart rate slowing. Prior to admission, her heart rate was 36 beats per minute with an 86% oxygen saturation level. Her bradycardia was thought to be secondary to a potassium level of 2.5 mEq/L detected on a lab draw by her primary care physician's office three days prior. In addition, she reports having had persistent nausea and vomiting for the last several days. She was recommended to report to the emergency department at that time. In the emergency department, she was found to have metabolic alkalosis and a potassium level of 2.4 mEq/L. Her EKG showed normal sinus rhythm with U waves. She was treated with potassium chloride infusion, omeprazole, ondansetron, her home pain regimen (oxycodone) and normal saline. Repeated labs in the morning revealed improvement in her hypokalemia and alkalosis. She was discharged home on oral potassium chloride and instructed to have a follow up basic metabolic panel with her primary care physician.

Figures



Figure 1. Hemorrhagic gastritis in the body of the stomach, shown on EGD.⁴

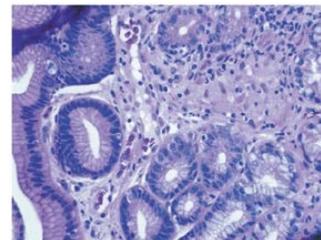


Figure 2. Central granuloma shown on gastric antral biopsy.³

Discussion

Gastrosarcoidosis is a rare disease that places a heavy clinical burden on a patient's quality of life. It most often presents as abdominal pain, nausea, vomiting and weight loss. For this reason, it has been shown to mimic irritable bowel syndrome in some cases.³ Studies have also found an association between gastrosarcoidosis and celiac disease,⁵ specifically in regards to the presence of anti-gliadin antibodies. Other fatal presentations of gastrosarcoidosis can be in the form of massive upper gastrointestinal bleeding.²

Discussion

Most symptoms arise due to the presence of peptic ulcerations or narrowing of the gastric lumen due to granulomatous inflammation resulting in diminished peristalsis.² Studies recommend screening patients with known pulmonary sarcoidosis and functional gastrointestinal symptoms with an upper gastrointestinal endoscopy and biopsy of any areas that seem abnormal.³

Medical management of gastrosarcoidosis depends on the activity and extent of the disease. Asymptomatic patients generally do not require treatment. If symptomatic, treatment includes glucocorticoids or immunosuppressive therapy. This is based on the treatment regimen used in pulmonary sarcoidosis. In addition, antisecretory or promotility agents may benefit patients with delayed gastric emptying. Surgery may be necessary in patients with pyloric stenosis or gastrointestinal hemorrhage. Other studies have found that intravenous hydrocortisone can also provide symptomatic relief in some patients. Complications to be aware of include intolerance to tube feedings if a patient has a jejunostomy tube placed, and persistent hypokalemia due to perpetual vomiting. Detection and proper management of gastrosarcoidosis is important in that misclassification of the illness may happen due to its similarity in presentation to irritable bowel syndrome.² This can delay much-needed symptomatic relief and clinical improvement in a patient with gastric involvement of their sarcoidosis.

References

1. Palmer ED, Colonel L. Note on silent sarcoidosis of the gastric mucosa. The Journal of laboratory and clinical medicine. 1958 Aug 1;52(2):231-4.
2. Fireman Z, Sternberg A, Yarchovskiy Y, Abu-Much S, Coscas D, Topilsky M, Fireman E, Groisman GM. Multiple antral ulcers in gastric sarcoid. Journal of clinical gastroenterology. 1987 Mar 1;24(2):97-9.
3. Leeds JS, McAlindon ME, Lorenz E, Dube AK, Sanders DS. Gastric sarcoidosis mimicking irritable bowel syndrome-Cause not association?. World journal of gastroenterology. WJG. 2006 Aug 7;12(29):4754.
4. Perez L, Brahmabhatt B, Rodriguez A, Raimondo M. Gastric Sarcoidosis Presenting as Gastroesophageal Dysmotility. American Journal of Gastroenterology. 2017 Oct 1;112.
5. McCormick PA, Feighery C, Dolan C, O'Farrelly C, Kelliher P, Graeme-Cook F, Finch A, Ward K, Fitzgerald MX, O'Donoghue DP. Altered gastrointestinal immune response in sarcoidosis. Gut. 1988 Dec 1;29(12):1628-31.