

# Do Not Forget About The NET: A Case of Neuroendocrine Tumors Observed In The Setting Of Autoimmune Atrophic Gastritis

William Ghaul DO<sup>1</sup>, Neil Patel DO<sup>2</sup>, Henry Lam DO<sup>3</sup>, Shashin Shah MD

<sup>1</sup>Department of Internal Medicine, <sup>2</sup>Department of Gastroenterology, Lehigh Valley Health Network, Allentown, PA

## Learning Objectives

- Describe the clinical features and symptomatology of gastric neuroendocrine tumors (NETs).
- Discuss the epidemiology and classification of NETs.
- Detail the recommended screening and treatment guidelines following the diagnosis of gastric NETs.

## Case

- 73-year-old female with a history of carcinoid tumor and pernicious anemia secondary to autoimmune gastritis presented with mild heartburn.
- Endoscopic evaluation showed well differentiated neuroendocrine tumor with chronic atrophic gastritis with loss of parietal cells in the gastric body.
- Repeat EGD 6 months later revealed multiple erythematous polyps in the fundus which were resected and sent for pathology.
- Recommended that the patient undergo surveillance EGD in 1 year.



Figure 1: EGD showing gastric NET in the fundus of the stomach.

## Discussion

- Most common areas for neuroendocrine tumors are GI tract (65%).
- Individuals with NETs are thought to experience the classic carcinoid syndrome (diarrhea, flushing, hypotension, and bronchospasm)
- Pernicious anemia is characterized by autoimmune atrophic gastritis secondary to the presence of anti-parietal cell antibodies which prevent the absorption of vitamin B12.
- The relative risk of developing gastric malignancy in patients with pernicious anemia such as the one described in the case is 6.8.

## Conclusion

- According to the American Society of Gastroenterology and Endoscopy, every patient with pernicious anemia is recommended to undergo repeat EGD after their diagnosis.
- The National Comprehensive Cancer Network recommends surveillance of those with G1 NET every 6 months for 3 years followed by yearly EGD surveillance.