

De Novo Association Between Gastrin and CEA in Colorectal Cancer

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INTRODUCTION

- Colorectal cancer (CRC) is the third leading cause of mortality in the United States. CEA and CA-19 remain the two most common prognostic markers for cancer surveillance.
- However, gastrin, a peptide hormone, may have some diagnostic benefits as well.
- Our case report uniquely demonstrates a positive and parallel correlation between gastrin and CEA levels in a patient diagnosed with Stage 3A colon adenocarcinoma status post sigmoidectomy and 5-FU therapy.

CASE DESCRIPTION

- We present an 84-year-old female with a past medical history of Stage 3A colon adenocarcinoma status post sigmoidectomy and 5-FU therapy, Hashimoto's thyroiditis, hypertension and paroxysmal atrial fibrillation on Eliquis who reported chronic diarrhea ongoing for the past seven years that she noticed worsening after the sigmoidectomy.
- Initial CEA was 4.2, Hg was stable at 12.5 and no other lab abnormalities were noted.
- Surveillance CT colonography, abdominal MRI and Dotatate scan demonstrated no evidence of any neuroendocrine tumor or mass.

CASE DESCRIPTION

- An extensive workup was unable to delineate any infectious or inflammatory etiology.
- 5-HIAA and paraneoplastic testing were negative.
- EGD revealed mucosal hyperplasia with concern for atrophic gastritis and a stomach pH of 8. With no history of PPI consumption and an initial gastrin level of 2242 pg/mL, Zollinger Ellinson syndrome was also subsequently excluded. Colonoscopy was unremarkable. Given initial elevation of serum gastrin, serial gastrin levels were obtained and were found to be closely correlated to the patient's elevated CEA levels.

DISCUSSION

- Our case report reveals that the gastrin and CEA lab values positively correlate with each other in a patient with underlying colon adenocarcinoma.
- Further studies to examine the significance and potential use of gastrin as a marker for diagnosing or determining prognosis in colorectal cancer is imperative.

