

Question 21 – Week of March 29

55-year-old African American female is found to be anemic with low B12 levels. Her anti-parietal cell and anti-intrinsic factor antibodies are positive and she is diagnosed with autoimmune gastritis with pernicious anemia. Which of the following statements with regards to her condition is false?

- A. Endoscopy may reveal gastric body and fundic polyps.
- B. Iron absorption is unaffected.
- C. Antibodies block the H^+/K^+ ATPase in the stomach.
- D. Gastric adenocarcinoma risk is increased up to 15 times the general population.
- E. Associate secondary hypergastrinemia can cause gastric carcinoids.

Answer: B

Autoimmune gastritis is the most common cause of B12 deficiency in the developed world. The prevalence increases with age (1.9% of population above 60yrs age). It is associated with other autoimmune conditions like Type I DM and autoimmune thyroiditis. Antibodies block the H^+/K^+ ATPase leading to achlorhydria. Iron absorption is inhibited secondary to lack of acidic gastric PH that is required to convert the ferric form of iron in the western diet to ferrous form and hence associated iron deficiency is not uncommon. Achlorhydria leads to secondary hypergastrinemia and parietal cell pseudohypertrophy and formation of hyperplastic polyps evident on endoscopy. Gastrin provides a trophic effect to the enterochromaffin cells in the stomach leading to carcinoid formation. There is an observed 3 to 18 times increased risk of gastric adenocarcinoma in these individuals.

References:

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