

Julia B. Greer, Haq Nawaz, and Dhiraj Yadav

Questions

1. A 77-year-old woman with a history of hepatitis B, mild hypertension, and type II diabetes mellitus presents at your office. Her husband passed away due to colon cancer and she has heard that taking ibuprofen might help decrease her own risk of developing this form of cancer. She has no evidence of renal disease from previous laboratory results, although her medical records indicate that she suffered a mini stroke about a decade ago. Which of the following is the greatest contraindication for her to take NSAIDs?
 - A. Her gender
 - B. Her history of hypertension and stroke
 - C. Her history of type II diabetes
 - D. Her history of hepatitis B

Answer: B

The use of NSAIDs has been conclusively determined to decrease the risk of developing colorectal cancer. However, the side effects of NSAID use, including upper GI bleeding and serious cardiovascular events such as myocardial infarction and heart failure, hemorrhagic stroke, and worsening of renal function, make them a risky choice for the geriatric population with preexisting heart or kidney disease. Chronic NSAID use tends to worsen blood pressure control and predisposes to electrolyte disturbances.

2. A 68-year-old obese male presents in the emergency department complaining of extreme abdominal pain, nausea, and vomiting of sudden onset. His amylase and lipase are over three times the upper limit of normal; he has elevated aminotransferase (ALT) and bilirubin levels. You make a diagnosis of acute pancreatitis. The most likely cause of his pancreatitis is:
 - A. Trauma
 - B. Alcohol
 - C. Gallstones
 - D. Medications

Answer: C

The most common causes of acute pancreatitis in older cohorts are gallstones. Other important differential includes medications and “idiopathic” causes—which indicates that an etiologic link to the patient’s pancreatitis cannot be determined. In contrast, alcohol plays a more important role as an etiological factor in younger individuals (35–64 years of age). Trauma is a much more likely etiology in children and is rarely observed in the geriatric age group.

3. A 66-year-old man presents to your office complaining of a problem with his bowel habits. He notes that, for at least 2 months, he has had increasing abdominal cramps and loose, foul-smelling stools. The color of his stools has now changed to a reddish, maroon shade; he also notes that he is more fatigued than usual. He has not kept track of how these problems relate to mealtime. The most important disease entity to rule out initially is:
 - A. Inflammatory bowel disease
 - B. Diverticular disease
 - C. *H. pylori* infection
 - D. Lactose intolerance

Answer: A

IBD is a more common disease entity in young adults, although about 15% of new cases of IBD are diagnosed in those greater than 65 years of age. Diverticular disease is considerably less likely to produce the described alterations in bowel habits and most often is not associated with any symptomatology. The patient’s symptoms are lower gastrointestinal in nature making *H. pylori* infection less likely to be the cause of his symptoms. Lactose intolerance is a possibility, but alteration in stool color is not a feature.

4. An 80-year-old woman presents to your office complaining of numbness and tingling in her fingers and toes, clumsiness, and what she describes as a “foggy memory.” She has no significant medical history and has been in very good health for all of her life until recently. She eats

a varied, omnivorous diet and has not had any major dietary changes, other than adding more fiber to her diet recently. Her fasting blood glucose level is 76 mg/dL (normal) and her electrolytes are normal; her mean corpuscular volume (MCV) is elevated at 110 femtoliters. The most likely cause of her anemia is:

- A. Celiac disease
- B. Decreased intake of B12-rich foods
- C. Occult gastrointestinal bleeding
- D. Food-cobalamin malabsorption

Answer: D

The most common reason for a person of this age to have both the signs (macrocytic anemia) and symptoms

(neuropathy and memory impairment) of vitamin B12 deficiency is due to food-cobalamin malabsorption, which implies the failure to separate B12 bound to food protein. This entity occurs in 40–50% vitamin B12-deficient cases; pernicious anemia from decreased gastric secretion of intrinsic factor is a less likely cause. This woman's symptoms could be caused by long-standing celiac disease, but a microcytic anemia from iron deficiency would be more common in cases of celiac disease. B12 stores take years to get depleted, even on a completely vegetarian diet. Occult GI bleeding would present with microcytic anemia and would not be likely to cause symptoms of a neuropathy. Multiple deficiencies should however be always ruled out.