

Question 1 – Week of August 6

A 70 year-old white woman is referred to your office with complaints of nausea and vomiting for the past 3 months. On further probing, she states that vomiting occurs 3-4 hours after food intake and at times she has vomited the food she had consumed a day prior. She has lost about 30lbs over the past 3 months and has noticed significant decrease in her appetite. She attributes that partly to bloating and feeling full very easily. Review of systems is otherwise unremarkable except for a distressing chronic cough for many years but has now been noticing some intermittent blood-tinged sputum. She has been feeling down given the death of her husband 7 months ago. She has not seen a physician for over 10 years, is not taking any prescription or over the counter medications. She has no other co-morbidities that she knows of. Since she was an adopted child, she does not know her family history. She smokes 1 pack of cigarettes every day, drinks 1-2 glasses of wine daily and has been doing so for the past 50 years. She has never used any recreational drugs. After a thorough evaluation, her internist had found delayed gastric emptying of solids and he sends her to you for further assistance.

Which of the following test will likely help identifying the underlying cause of her symptoms?

- A. Fasting Glucose level
- B. A Thyroid profile
- C. Anti neuronal nuclear antibody-1 (ANNA-1)
- D. Antinuclear antibody (ANA) and Anti scl-70 antibody
- E. Psychiatric evaluation

Answer: C

This woman likely has gastroparesis as evident by delayed gastric emptying and her symptoms. The most likely etiology for her gastroparesis seems to be a paraneoplastic manifestation from a concomitant small cell lung cancer, especially given bloody sputum, weight loss and smoking history. ANNA-1 is a type of auto-antibody against the enteric nervous system resulting gut dysmotility. Other etiologies like diabetes mellitus, hypothyroidism, and scleroderma are possible but will not explain her hemoptysis. Depression would not cause a delay in gastric emptying.

Reference:

Lucchinetti CF, Kimmel DW, Lennon VA. Paraneoplastic and oncologic profiles of patients seropositive for type 1 antineuronal nuclear autoantibodies. *Neurology* 1998;50:652-657