

Question 14 – Week of March 12

An 82 year old female patient who was diagnosed with a pulmonary embolism after a motor vehicle accident two years earlier comes into her primary care physician's office and is offered colon cancer screening. She is currently refusing invasive testing and is to remain on baby aspirin long-term. She is given multiple screening options and decides she wants to take the "stool cards" home. Which of the following is true?

- A. Fecal occult blood testing with 3 cards is a reasonable option provided she stops her baby aspirin 1 week prior.
- B. Fecal immunohistochemical testing (FIT) is an even better option provided she stops her baby aspirin 1 week prior.
- C. Better accuracy with fecal occult blood testing can be achieved if the cards are rehydrated.
- D. It is a good thing she is taking baby aspirin as the fecal immunohistochemical test (FIT) is turned into an accurate, viable screening test for colon cancer with daily baby aspirin use.
- E. Stool DNA testing is more cost-effective than either fecal occult blood or immunohistochemical testing.

Answer: D

FIT is an ELISA-based test for the globin protein. The globin protein of any upper GI bleeding induced by baby aspirin will be degraded by stomach acid. Brenner et al (JAMA 2010) showed the sensitivity of FIT improved from 35.9% to 70.8% ($p=0.01$) with no loss of specificity (85.7% vs. 89.2% $p=0.13$) in those FIT tested patients who used baby aspirin. The sensitivity and specificity of FOBT is too poor even with 3 cards (23.9% Collins et al. Annals of Int Med 2005) to make it a viable screening test. Stool DNA testing remains too costly (\$400-800 per test with an estimated cost/life year saved=\$47,700 Song et al Gastro 2004).