Colorectal Neoplasia Yield Similar for FIT Every One, Two, or Three Years

Clinical Question
What is the best interval for fecal immunochemical testing (FIT) as a screening test for colorectal cancer?

Bottom Line
There appears to be no advantage to obtaining FIT more often than every three years. (Level of Evidence = 1b)

Synopsis
FIT is a way to screen for colorectal cancer, and even in these days of widespread colonoscopy, many patients refuse colonoscopy, so alternatives remain important. Although FIT has a better yield than older guaiac-based tests, repeated rounds of screening are necessary because of limited sensitivity of the test. In this study, 10,698 Dutch residents were invited to participate in a trial comparing four strategies: a single round of screening using two FITs, or a single FIT at baseline and again one, two, or three years later. (There is currently no formal colorectal cancer screening program in the Netherlands.) Approximately 62% of patients responded to the invitation for screening. In the three groups that received a single initial FIT, 8.4% of patients had a positive test result, and 3.3% had advanced neoplasia (colorectal cancer or an adenoma that was at least 10 mm, more than 25% villous histology, or had evidence of dysplasia). In the group that received a pair of FITs at the initial visit, 12.7% of patients had a positive test result and 4.1% had advanced neoplasia. The key finding is that at the second visit, there was no difference between the one-, two-, and three-year interval groups regarding percentage attendance for screening, percentage with a positive test result, or percentage with advanced neoplasia (1.7% to 2.1%). Of 32 colorectal cancers detected in the entire population (based on linkage to a cancer registry), 29 were screen-detected, 22 of which were during the initial round. Better participation in the second round of screening was noted for patients in the biennial and triennial screening intervals compared with those who underwent annual screening.

Study Information
Study design: Randomized controlled trial (nonblinded)
Funding source: Government
Allocation: Concealed
Setting: Population-based

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