

Improving the Detection of Colorectal Cancer Through Fecal Testing

Using two fecal tests instead of one increased the sensitivity levels of the testing method for colorectal cancer.

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Fecal immunochemical testing (FIT) is a commonly used method for screening and diagnosis of colorectal cancer (CRC) in patients who are exhibiting typical [signs and symptoms](#) of the disease. FIT testing is widely used in preventing CRC as test kits can be mailed to patients to collect the sample and shipped back for laboratory analysis. This allows patients who may be ambivalent about more invasive testing to engage in a safe and effective preventative method in the comfort of their home. This form of testing, while an effective way of assessing and prioritizing patients with the highest risk, exhibits low levels of sensitivity (approximately 87%).

Double FIT More Sensitive

In order to improve the sensitivity levels of FIT assessments, researchers from Scotland conducted two sequential, prospective cohort [studies](#) to measure and compare the sensitivity levels of both single and double FIT. Following a general practitioner referral, patients selected for the study were shipped either one or two FIT kits depending on their assigned study group, and results were analyzed following kit return.

In the single FIT cohort, assessments were able to detect the presence of CRC with 84.1% sensitivity and advanced colorectal neoplasia with 64.4% sensitivity. These results were significantly lower than the sensitivity levels of the double FIT strategy, with this strategy being able to detect colorectal cancer with 96.6% sensitivity. Double FIT testing was also able to significantly improve detection of advanced colorectal neoplasia, with this strategy detecting disease at 81.6% sensitivity.

This research reveals that double FIT may be an effective way to increase the accuracy of preventative testing measures, especially in symptomatic populations.

While double FIT testing can provide increased accuracy and sensitivity when screening for CRC, obtaining two FIT submissions from patients is more difficult than obtaining a single test result. In

this specific study, 22% of patients in the double FIT cohort only returned a single test, which reveals that this strategy may require innovative follow-up methods.

A [2017 study](#) by researchers within a hospital system in Texas found that mailed outreach literature and free testing kits increased rates of preventative screening measures, including FIT completion. In order to ensure that double FIT is an effective strategy, hospitals and clinics can develop and mail out literature that invites and encourages patients to complete two consecutive FIT's tests. Other strategies could include social media, email, and notifications in patient portals.

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