



Title	Fecal Immunochemical Tests for Colorectal Cancer Screening: A Systematic Review of Accuracy and Compliance
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Aim

To review the evidence on diagnostic accuracy and patient compliance when using fecal immunochemical tests to screen for colorectal cancer.

Results and conclusions

Fecal immunochemical testing (FIT) may be an effective method to screen for colorectal cancer (CRC) and advanced adenomas, and may be more effective when compared with other screening tests, eg, the guaiac fecal occult blood test (gFOBT). In particular, the HemeSelect, FlexSure OBT, and OC-Sensor Micro FITs demonstrate improved diagnostic performance characteristics compared with gFOBT. All included studies that compared participation rates of FIT with other tests showed that FIT had higher completion rates than the other tests, including gFOBT.

Limitations of the included studies should be considered during decision making. Other things to consider when making decisions about the appropriateness of FIT as a screening tool for CRC include the type of FIT to be used, the associated costs, the appropriate hemoglobin cutoff level, and the capacity for follow-up using colonoscopy (CS) or flexible sigmoidoscopy (FS).

Recommendations

Not applicable.

Methods

Literature published in English between 2004 and April 2009 comparing fecal immunochemical tests (FIT) with guaiac fecal occult blood tests (gFOBT) was selected from bibliographic databases, the websites of relevant agencies and associations, and other specialized databases. Two independent reviewers selected articles for inclusion based on specific criteria and resolved disagreements by consensus. Outcomes of interest included sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) to detect advanced adenomas and colorectal cancer (CRC). This report reviews and discusses the results.

Further research/reviews required

To more accurately assess the impact of screening, more evidence is needed from studies that evaluate the sensitivity and specificity of these tests.