

CADTH RAPID RESPONSE REPORT: REFERENCE LIST

Occult Blood Detection Testing for Non-Colorectal Cancer Related Medical Conditions: Clinical Effectiveness

Service Line: Rapid Response Service
Version: 1.0
Publication Date: April 15, 2019
Report Length: 6 Pages

Authors: Camille Dulong, Aleksandra Grobelna

Cite As: Occult blood detection testing for non-colorectal cancer related medical conditions: clinical effectiveness. Ottawa: CADTH; 2019 April. (CADTH rapid response report: reference list).

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Funding: CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.

Research Questions

1. What is the clinical effectiveness of the fecal immunochemical test in detecting medical conditions other than colorectal cancer where occult blood detection is needed?
2. What is the clinical effectiveness of the guaiac fecal blood occult test in detecting medical conditions other than colorectal cancer where occult blood detection is needed?

Key Findings

No relevant literature was identified regarding the clinical effectiveness of fecal immunochemical testing or guaiac fecal blood occult testing in medical conditions other than colorectal cancer.

Methods

A limited literature search was conducted on key resources including PubMed, the Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, randomized controlled trials, non-randomized studies. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2014 and April 8, 2019. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

Population	Patients being screened for medical conditions where occult blood detection is necessary, including colorectal cancer
Intervention	Q1: Fecal Immunochemical Test (FIT) Q2: Guaiac Fecal Occult Blood Test (gFOBT)
Comparators	Q1: Guaiac Fecal Occult Blood Test (gFOBT) Q2: Fecal Immunochemical Test (FIT)
Outcomes	Q1-2: Clinical effectiveness (i.e. detection of medical conditions where occult blood detection is necessary other than colorectal cancer, e.g., gastrointestinal (GI) bleeding, ulcer bleeding)
Study Designs	Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies

Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and non-randomized studies.

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized were identified regarding the clinical effectiveness of fecal immunochemical testing or guaiac fecal occult blood testing for medical conditions where occult blood detection is necessary.

References of potential interest are provided in the appendix.

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.

Appendix — Further Information

Previous CADTH Reports

1. Urgent, non-screening fecal occult blood testing for patients with suspected gastrointestinal bleeding: a review of clinical effectiveness and guidelines. (CADTH rapid response report: summary with critical appraisal). Ottawa (ON): CADTH; 2017: <https://www.cadth.ca/sites/default/files/pdf/htis/2017/RC0839%20FOBT%20in%20Hospitals%20Final.pdf>. Accessed 2019 Apr 12.
2. Guaiac fecal occult blood test compared with alternative tests for patients with unexplained anemia or suspected colorectal cancer: comparative clinical utility, cost-effectiveness, and evidence-based guidelines. (CADTH rapid response report: summary of abstracts). Ottawa (ON): CADTH; 2016: <https://www.cadth.ca/sites/default/files/pdf/htis/july-2016/RB1006%20gFOBT%20Final.pdf>. Accessed 2019 Apr 12.

Non-Randomized Studies

No Comparator

3. He E, Alison R, Blanks R, et al. Association of ten gastrointestinal and other medical conditions with positivity to faecal occult blood testing in routine screening: a large prospective study of women in England. *Int J Epidemiol*. 2019 Jan 21. [PubMed: PM30668711](#)
4. Bevan R, Lee TJ, Nickerson C, Rubin G, Rees CJ. Non-neoplastic findings at colonoscopy after positive faecal occult blood testing: data from the English Bowel Cancer Screening Programme. *J Med Screen*. 2014 Jun;21(2):89-94. [PubMed: PM24644029](#)
5. Mollick SH, Roy PK, Bhuiyan MR, et al. Prevalence of colorectal diseases in immunological fecal occult blood test (I-FOBT) positive patients in a tertiary care hospital in Bangladesh. *Mymensingh Med J*. 2014 Oct;23(4):764-769. [PubMed: PM25481598](#)

Pediatric Population

6. Moran CJ, Kaplan JL, Winter HS, Masiakos PT. Occult blood and perianal examination: value added in pediatric inflammatory bowel disease screening. *J Pediatr Gastroenterol Nutr*. 2015 Jul;61(1):52-55. [PubMed: PM25651490](#)

Diagnostic Test Accuracy – Alternative Comparator

7. Hogberg C, Karling P, Rutegard J, Lilja M. Diagnosing colorectal cancer and inflammatory bowel disease in primary care: The usefulness of tests for faecal haemoglobin, faecal calprotectin, anaemia and iron deficiency. A prospective study. *Scand J Gastroenterol*. 2017 Jan;52(1):69-75. [PubMed: PM27623716](#)

8. Ryu DG, Kim HW, Park SB, et al. Assessment of disease activity by fecal immunochemical test in ulcerative colitis. *World J Gastroenterol*. 2016 Dec 28;22(48):10617-10624.
[PubMed: PM28082814](#)
9. Kobayashi Y, Watabe H, Yamada A, et al. Impact of fecal occult blood on obscure gastrointestinal bleeding: observational study. *World J Gastroenterol*. 2015 Jan 7;21(1):326-332.
[PubMed: PM25574108](#)

Additional References

10. Mathews BK, Ratcliffe T, Sehgal R, Abraham JM, Monash B. Fecal occult blood testing in hospitalized patients with upper gastrointestinal bleeding. *J Hosp Med*. 2017;12(7):567-569.
<https://www.journalofhospitalmedicine.com/jhospmed/article/142059/hospital-medicine/fecal-occult-blood-testing-hospitalized-patients-upper>. Accessed 2019 Apr 12