



IL TEST FOBT NELLA DIAGNOSTICA CLINICA DI I° LIVELLO: QUALI INDICAZIONI?

WORKSHOP
I RISULTATI DEL PROGRAMMA REGIONALE DI SCREENING COLORETTALE
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**S.O.C. GASTROENTEROLOGIA ED ENDOSCOPIA
DIGESTIVA**

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PERFORATION

Colonic perforation during colonoscopy may result from mechanical forces against the bowel wall, barotrauma, or as a direct result of therapeutic procedures. Early symptoms of perforation include persistent abdominal pain and abdominal distention. Later, patients may develop peritonitis. Plain radiographs of the chest and abdomen may demonstrate free air, although CT scans have been shown to be superior to the upright chest film.¹⁸ Therefore, an abdominal CT scan should be considered for patients with an unrevealing plain film in whom there is a high suspicion of perforation.

The rate of perforation reported in large studies is 0.3% or less and is generally less than 0.1%.² In a large study of screening colonoscopy, perforation was reported in 13 of 84,412 procedures (0.01%).¹⁹ In a case-controlled study of 277,434 Medicaid beneficiaries undergoing colonoscopy, the rate of perforation was 8.2 per 10,000 procedures (0.08%) compared with 0.3 per 10,000 matched controls (0.003%).²⁰ In a study analyzing over 50,000 colonoscopies and using Medicare claims data, the rate of

HEMORRHAGE

Hemorrhage is most often associated with polypectomy, although it can occur during diagnostic colonoscopy. When associated with polypectomy, hemorrhage may occur immediately or can be delayed for several weeks after the procedure.²⁵ A number of large studies have reported hemorrhage in 1 to 6 per 1000 colonoscopies (0.1%-0.6%).² A study analyzing over 50,000 colonoscopies by using Medicare claims found that the rate of GI hemorrhage was significantly different with or without polypectomy: 2.1 per 1000 procedures coded as screening without polypectomy and 3.7 per 1000 for procedures coded as diagnostic without polypectomy, compared with 8.7 per 1000 for any procedures with polypectomy.⁴

Guidelines for the management of iron deficiency anaemia

Andrew F Goddard
on behalf of the British Society of Gastroenterology

Investigations

- ▶ Upper and lower GI investigations should be performed in all postmenopausal female and all men where IDA has been confirmed unless there is evidence of significant overt non-GI blood loss. (A)
- ▶ All patients should be screened for coeliac disease. (B)
- ▶ If oesophagogastroduodenoscopy (OGD) is performed as the initial GI investigation, only the presence of advanced gastric cancer or coeliac disease should determine lower GI investigation (B).
- ▶ In patients aged >50 or with marked iron deficiency and a significant family history of colorectal cancer, lower GI investigation should still be considered even if coeliac disease is found (B).
- ▶ Colonoscopy has advantages over CT scan as an investigation of the lower GI tract in IDA. Colonoscopy is acceptable (B). Either is preferable to CT scan if both are available which is useful if they are not available (B).
- ▶ Further direct visualisation of the small intestine is necessary unless there are symptoms of small bowel disease, or if the haemoglobin has been restored or maintained with iron therapy (B).
- ▶ In patients with recurrent IDA and no evidence of coeliac disease on colonoscopy results, *Helicobacter pylori* should be eradicated if present. (C).
- ▶ Faecal occult blood testing is of no value as an investigation of IDA (B).
- ▶ All premenopausal women with IDA should be screened for coeliac disease, but not for colorectal cancer. (B)

Table 1 Pathological contributors to iron deficiency anaemia in the UK with prevalence as percentage of total⁴⁻⁹

| Contributor | Prevalence |
|---|------------|
| Occult GI blood loss | |
| Common | |
| Aspirin/NSAID use | 10–15% |
| Colonic carcinoma | 5–10% |
| Gastric carcinoma | 5% |
| Benign gastric ulceration | 5% |
| Angiodysplasia | 5% |
| Uncommon | |
| Oesophagitis | 2–4% |
| Oesophageal carcinoma | 1–2% |
| Gastric antral vascular ectasia | 1–2% |
| Small bowel tumours | 1–2% |
| Cameron ulcer in large hiatus hernia | <1% |
| Ampullary carcinoma | <1% |
| Ancylomastia duodenale | <1% |
| Malabsorption | |
| Common | |
| Coeliac disease | 4–6% |
| Gastrectomy | <5% |
| <i>Helicobacter pylori</i> colonisation | <5% |
| Uncommon | |
| Gut resection | <1% |
| Bacterial overgrowth | <1% |
| Non-GI blood loss | |
| Common | |
| Menstruation | 20–30% |
| Blood donation | 5% |
| Uncommon | |
| Haematuria | 1% |
| Epistaxis | <1% |

GI, gastrointestinal; NSAID, non-steroidal anti-inflammatory drug.

Upper and lower GI evaluation

Upper and lower GI investigations should be considered in all postmenopausal female and all male patients where IDA has been confirmed unless there is a history of significant overt non-GI blood loss. In the absence of suggestive symptoms (which are unreliable), the order of investigations is determined by local availability, although all patients should be screened for coeliac disease with serology (B)—see below. If oesophagogas-

An Audit of the Utility of In-Patient Fecal Occult Blood Testing

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METHODS: We performed a retrospective chart review of 1000 randomly selected patients who had been discharged from the Medicine service at four teaching hospitals. Patient demographics, clinical presentation, presence or absence of overt GI bleeding, and use of medications that might affect the FOBT were recorded. Reviewers assessed whether patients who had FOBT would have been candidates for colon resection if asymptomatic colon cancer had been found.

CONCLUSIONS: The FOBT, which is validated only for colorectal cancer screening, is often performed inappropriately in patients admitted to the hospital. This test should be restricted in hospital practice. It would be preferable to identify patients who are appropriate candidates for colorectal cancer screening at the time of hospital discharge and to advise them about the appropriate performance of the FOBT at home. (Am J Gastroenterol 2001;96:1256-1260. © 2001 by Am. Coll. of Gastroenterology)

ALIMENTARY TRACT: CLINICAL RESEARCH

Prospective Evaluation of the Use and Outcome of Admission Stool Guaiac Testing: The Digital Rectal Examination on Admission to the Medical Service (DREAMS) Study

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Methods: We prospectively evaluated 2143 patients admitted to the medical service at our hospital over a 1-year period. A detailed clinical history was obtained, and the proportion of patients who had DRE and ASG testing, the frequency of positive tests, and the results of follow-up testing were determined.

Conclusions: Although DRE and ASG testing are commonly performed on admission to the hospital, documentation of the findings and follow-up of positive tests are poor. These findings highlight the need to improve physician training on the appropriate use and documentation of the DRE and fecal occult blood testing.

Inappropriate use of the faecal occult blood test outside of the National Health Service colorectal cancer screening programme

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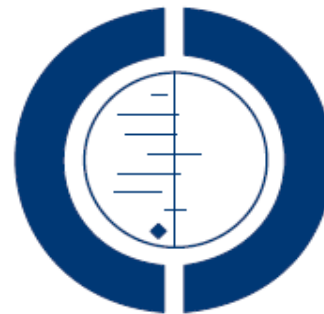
Results A total of 758 FOBTs were requested in 701 patients (352 female; median age 69; range 16–99). The majority (91%) were requested by general practitioners. A total of 515 out of 758 tests (68%) were performed in patients outside the NHS BCSP age range. Thirty-seven out of 86 positive FOBTs were investigated, diagnosing four rectal cancers and two polyps. Forty-nine out of 87 patients with a positive FOBT were not investigated further by the requesting physician or the test repeated. Of the remaining 672 FOBTs, 615 were negative and 57 were either incomplete or unsuitable for analysis. A total of 111

patients (18%) were referred to hospital and 105 of these had FOBT performed as part of the referral process.

Conclusion Our study demonstrates significant misuse of the FOBT outside the NHS BCSP. Inappropriate use leads to false positives and exposes patients to unnecessary risk. False negatives provide reassurance to patients who may have symptoms that should be investigated. The FOBT should not be available to physicians in either primary or secondary care and be restricted to NHS BCSP. *Eur J Gastroenterol Hepatol* 24:1270–1275 © 2012 Wolters Kluwer Health | Lippincott Williams & Wilkins.

Screening for colorectal cancer using the faecal occult blood test, Hemoccult (Review)

Hewitson P, Glasziou PP, Irwig L, Towler B, Watson E



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Screening for colorectal cancer using the faecal occult blood test, Hemoccult (Review)
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Main results

Combined results from the 4 eligible randomised controlled trials shows that participants allocated to FOBT screening had a statistically significant 16% reduction in the relative risk of colorectal cancer mortality (RR 0.84; CI: 0.78-0.90). In the 3 studies that used biennial screening (Funen, Minnesota, Nottingham) there was a 15% relative risk reduction (RR 0.85, CI: 0.78-0.92) in colorectal cancer mortality. When adjusted for mean screening attendance in the individual studies, there was a 25% relative risk reduction (RR 0.75, CI: 0.66 - 0.84) for those attending at least one round of screening using the faecal occult blood test.

Authors' conclusions

Benefits of screening include a modest reduction in colorectal cancer mortality, a possible reduction in cancer incidence through the detection and removal of colorectal adenomas, and potentially, the less invasive surgery that earlier treatment of colorectal cancers may involve.

Harmful effects of screening include the psycho-social consequences of receiving a false-positive result, the potentially significant complications of colonoscopy or a false-negative result, the possibility of overdiagnosis (leading to unnecessary investigations or treatment) and the complications associated with treatment.



GUIDELINE



Appropriate use

Colonoscopy

Colonoscopy is generally indicated in the following circumstances:

- A. Evaluation of an abnormality on barium enema or other imaging study that is likely to be clinically significant, such as a filling defect and stricture.
- B. Evaluation of unexplained GI bleeding:
 1. Hematochezia.
 2. Melena after an upper GI source has been excluded.
 3. Presence of fecal occult blood.
- C. Unexplained iron deficiency anemia.
- D. Screening and surveillance for colonic neoplasia:
 1. Screening of asymptomatic, average-risk patients for colonic neoplasia.
 2. Examination to evaluate the entire colon for synchronous cancer or neoplastic polyps in a patient with treatable cancer or neoplastic polyp.
 3. Colonoscopy to remove synchronous neoplastic lesions at or around the time of curative resection of cancer followed by colonoscopy at 1 year and, if normal, then 3 years, and, if normal, then 5 years thereafter to detect metachronous cancer.
 4. Surveillance of patients with neoplastic polyps.

- FOBT è un test di screening
- Può essere tenuto in considerazione
 - Fasce di età al di fuori dello screening , soprattutto nell'età avanzata
 - Pazienti con pluripatologie
 - Ad alto rischio per indagini invasive
 - Nel caso in cui il paziente rifiuti la colonscopia come primo test



GRAZIE DELL'ATTENZIONE