



## Evidence-Based Series 15-6

A Quality Initiative of the  
Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

### Gastroscopy Following a Positive Fecal Occult Blood Test and Negative Colonoscopy

*J. Allard, R. Cosby, M.E. Del Giudice, E.J. Irvine, D. Morgan, and J. Tinmouth*

Report Date: March 30, 2009

An assessment conducted in November 2013 deferred the review of placed Evidence-based Series 15-6, which means that the document remains current until is assessed again next year..

Evidence-based Series (EBS) 15-6, consists of 3 sections  
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**Section 1: Guideline Recommendations**

**Section 2: Evidentiary Base**

**Section 3: EBS Development Methods and External Review Process**

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## **Evidence-Based Series 15-6: Section 1**

# **Gastroscopy Following a Positive Fecal Occult Blood Test and Negative Colonoscopy: Guideline Recommendations**

*J. Allard, R. Cosby, M.E. Del Giudice, E.J. Irvine, D. Morgan, and J. Tinmouth*

A Quality Initiative of the Upper GI Screening Panel and the Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

**Report Date: March 30, 2009**

### **QUESTION**

Should gastroscopy for upper gastrointestinal (UGI) cancer be performed for patients with a positive fecal occult blood test (FOBT) and negative colonoscopy who are participating in a population-based colorectal cancer (CRC) screening program?

### **TARGET POPULATION**

This guideline is targeted toward men and women who participate in a CRC screening program and have had a positive FOBT followed by colonoscopy without identifiable colonic lesions to account for their positive FOBT.

### **INTENDED USERS**

The intended users of this guidance document are health professionals involved in the screening, diagnosis, treatment, and follow up of persons enrolled in a population-based CRC screening program. This may include gastroenterologists, family physicians, surgeons, and other health care professionals.

## RECOMMENDATIONS AND KEY EVIDENCE

### Recommendation

The current body of evidence is insufficient to recommend for or against, in a population-based CRC screening program, routine esophagogastroduodenoscopy (EGD) in FOBT positive/colonoscopy negative patients to detect gastric or esophageal cancers. The decision to undertake an EGD should be based on clinical judgement and should be individualized.

### Key Evidence

- Four prospective (1-4) and five retrospective (5-9) studies of patients who were FOBT positive/colonoscopy negative and had an EGD. Of these, two studies (4,9) reported positive EGD but no information about endoscopic findings and several studies did not document the presence of anemia, upper gastrointestinal (UGI) symptoms or use of non steroidal anti-inflammatory drugs (NSAIDS).
- Based on this limited evidence, EGD had a low yield for UGI cancer, generally  $\leq 1\%$ , even in symptomatic or severely anemic patients. The yield for detecting non-malignant findings potentially contributing to positive FOBT was 11-21% while the yield for incidental findings unlikely contributing to positive FOBT was 10-36%. There were very few data regarding EGD results in the context of anemia or NSAIDS use.

### Qualifying Statement

A recommendation regarding the use of EGD for the detection of non-cancerous pathology is not provided because it is beyond the scope of this review.

## FUTURE RESEARCH

Further adequately powered studies are needed to investigate the incidence of gastric or esophageal cancer in patients, enrolled in a population based colorectal cancer screening program, who are FOBT positive and colonoscopy negative.

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## REFERENCES

1. Thomas WM, Hardcastle JD. Role of upper gastrointestinal investigations in a screening study for colorectal neoplasia. *Gut*. 1990;31(11):1294-7.
2. Hsia PC, al-Kawas FH. Yield of upper endoscopy in the evaluation of asymptomatic patients with Hemoccult-positive stool after a negative colonoscopy. *Am J Gastroenterol*. 1992;87(11):1571-4.
3. Zuckerman G, Benitez J. A prospective study of bidirectional endoscopy (colonoscopy and upper endoscopy) in the evaluation of patients with occult gastrointestinal bleeding. *Am J Gastroenterol*. 1992;87(1):62-6.
4. Stray N, Weberg R. A prospective study of same day bi-directional endoscopy in the evaluation of patients with occult gastrointestinal bleeding. *Scand J Gastroenterol*. 2006;41(7):844-50.
5. Chen YK, Gladden DR, Kestenbaum DJ, Collen MJ. Is there a role for upper gastrointestinal endoscopy in the evaluation of patients with occult blood-positive stool and negative colonoscopy? *Am J of Gastroenterol*. 1993;88(12):2026-9.
6. Bini EJ, Rajapaksa RC, Valdes MT, Weinshel EH. Is upper gastrointestinal endoscopy indicated in asymptomatic patients with a positive fecal occult blood test and negative colonoscopy? *Am J Med*. 1999;106(6):613-8.
7. Zappa M, Visioli CB, Ciatto S, Grazzini G, Rubeca T, Bonanomi AG, et al. Gastric cancer after positive screening faecal occult blood testing and negative assessment. *Dig Liver Dis*. 2007;39(4):321-6.
8. Hisamuddin K, Mowat NAG, Phull PS. Endoscopic findings in the upper gastrointestinal tract of faecal occult blood-positive, colonoscopy-negative patients. *Dig Liver Dis*. 2006;38(7):503-7.
9. Ali M, Yaqub M, Haider Z, Anees I, Bhargava S, Gian J. Yield of dual endoscopy for positive fecal occult blood test. *Am J Gastroenterol*. 2003;98(1):82-5.