

What is a faecal occult blood test?

A faecal occult blood test (FOBT) detects the presence of haemoglobin in the faeces, which may indicate colorectal adenomas or cancers.

There are two types of FOBT; gFOBT which involves the use of a guaiac impregnated card and iFOBT in which haemoglobin is detected immunologically. The relative sensitivity of these tests is influenced by the amount of haemoglobin present in the faeces.

In New Zealand, laboratories use either gFOBT, iFOBT or gFOBT in conjunction with iFOBT as a confirmatory test. Laboratories using gFOBT alone may require the patient to undertake dietary restrictions two days prior to testing. This should be discussed with individual laboratories. It is not necessary to specify the type of test when requesting a FOBT.

Are faecal occult blood tests effective?

There is evidence that FOBT is an effective method for screening for colorectal cancer. A 2007 Cochrane meta-analysis found that iFOBT or gFOBT screening in people aged 45 to 75 years prevents approximately one in six deaths due to colorectal cancer.¹ However, approximately 80% of positive FOBT results are false-positives as there are many other causes for gastrointestinal bleeding, such as haemorrhoids or anal fissures. This can lead to anxiety and potentially unnecessary invasive procedures, e.g. colonoscopy.¹

When should a faecal occult blood test be requested?

There is currently no national FOBT screening programme for colorectal cancer in New Zealand, however, a four year pilot in the Waitemata District Health Board region



is underway. This will determine if a national screening programme is appropriate for New Zealand.

Routine use of FOBT is not recommended, until such a time that a screening programme is established. The decision to request a FOBT should be made on an individual basis in patients aged over 50 years, whose risk does not indicate referral for colonoscopy, based on colorectal cancer management guidelines.²

When is a faecal occult blood test not appropriate?

A FOBT is not recommended as a surveillance tool for people at increased risk of colorectal cancer or for people with a previous history of colorectal cancer, or as an investigation tool for people with symptoms of colorectal cancer. Symptomatic people should be referred on the basis of risk, symptoms and clinical examination. People at increased risk of colorectal cancer, or who have a previous history of colorectal cancer require regular colonoscopy.² Local resourcing of colonoscopy services may influence the pathway of evaluation. This should be discussed with local DHBs.

The use of FOBT in people aged under 50 years is not recommended. The proportion of false-positive results increases significantly in this age group, because the background rates of colorectal cancer are lower.

In people aged over 50 years, factors such as advanced age, co-morbidities, reduced life expectancy or reduced fitness for invasive procedures should be considered before requesting a FOBT.

For further information see: "Surveillance of people at increased risk of colorectal cancer", BPJ 44 (May, 2012).

How is the sample collected?

Faecal sample collection methods vary depending on the laboratory and whether or not a purpose-made collection kit is used. Check with your local laboratory.

Generally, a sample from two or three bowel movements is collected by the patient with a spatula, brush or cloth which is then stored in separate specimen containers, or applied to the cardboard patches of a kit. The sample should then be delivered to the laboratory as soon as practically possible.

How should the results of a faecal occult blood test be managed?

A positive result

A patient with a positive FOBT result requires further investigation, including clinical examination for benign causes of bleeding, and is likely to require referral for a colonoscopy. There is no need to repeat the FOBT.

A negative result

A negative result does not guarantee that an adenoma or cancer is absent, as the lesions may not be bleeding or the bleeding may be intermittent. The FOBT does not need to be repeated, but the patient should be instructed to report any persistent change in bowel symptoms.

All patients, regardless of FOBT results, should be encouraged to make healthy lifestyle choices including; avoiding excessive consumption of red and processed meats, high-fat dairy products and highly refined grains, starches and sugars, maintaining a healthy body weight, undertaking regular exercise, not smoking and drinking less than two standard units of alcohol per day.

References

- Hewitson P, Glasziou P, Irwig L, et al. Screening for colorectal cancer using the faecal occult blood test, Hemoccult. Cochrane Database Syst Rev 2007;(1):CD001216.
- New Zealand Guidelines Group (NZGG). Guidance on surveillance for people at increased risk of colorectal cancer. Wellington: NZGG; 2012. Available from: www.nzgg.org.nz (Accessed Jun, 2012).

