pathlab



November 2014

Enteric Processing

Faecal Occult Blood (FOB) Testing

From 1st December 2014, FOB tests will not be performed on samples where it is clear that the patient is being investigated for recent onset diarrhoea of suspected infectious origin.

When utilising the FOB test, please indicate the clinical rationale. When FOB testing is requested simultaneously with a request for diagnosis of infectious pathogens (i.e bacterial culture, parasites, *C.difficile* toxin etc.), the FOB component of the request will be rejected with an appropriate comment placed on the report.

FOB testing is designed and validated as a screening test for colorectal cancer. When the test is used in the clinical setting of acute or suspected infectious diarrhoea it is prone to both poor sensitivity and specificity, and is generally unhelpful in the management of the patient.

We will continue as before to comment on the macroscopic appearance of the stool sample, including the presence or absence of blood.
Reference: BPAC: Laboratory Investigation of Infectious Diarrhoea

With regards to laboratory testing of FOB, we aim to standardise our methodology throughout all our laboratories. **From 1st December 2014, the detection of FOB will be performed solely by immunochemical methodology using specific antibodies aimed at detecting human haemoglobin.** This protocol is already in place in the Waikato region, and samples from patients in the Bay of Plenty and Rotorua will change to this testing protocol also. The non-specific initial "Guaiac" screen will be discontinued.

The following points should be noted with regards to FOB testing:

- FOB testing should not be performed more frequently than 2-yearly or in those under 50 years of age.
- FOB testing by immunochemical methodology does not require dietary adjustment and a single specimen is required (not three).
- A negative result does not exclude colon cancer.
- A positive FOB test requires follow-up since approximately 1 in 10 appropriately tested patients with a positive result will have a colonic neoplasm.

For more details on best practice on FOB testing, see http://www.bpac.org.nz/BT/2012/June/06_faecal_occult.aspx

CLINICAL UPDATE

Investigation of Enteric Parasites with More Focused Utilisation of Wet Films

The investigation of stool specimens for faecal parasites at Pathlab has been reviewed in detail. Our traditional policy has been to perform an initial wet film on all stool samples received by the laboratory. However this practice is labour intensive and for the vast majority of patients, does not provide useful information. It is also not consistent with laboratory practice throughout the rest of New Zealand.

From 1st December 2014, wet films will only be performed on the following samples:

- **Samples from those patients with a documented history of foreign travel.** With respect to parasite investigation, these samples will receive a wet film, faecal concentrate microscopy and where indicated, specialised parasite staining.

- **Samples where a diagnosis of *Blastocystis hominis* or *Dientamoeba fragilis* has been specifically requested.** If a patient presents with prolonged low grade diarrhoea with no obvious cause, and giardiasis and cryptosporidium infection has been excluded, then it may be worthwhile specifically requesting diagnosis of *Blastocystis hominis* and *Dientamoeba fragilis* infection. These parasites are generally of low virulence and almost always of uncertain significance when found in stool microscopy. However by carefully selecting the patients in which such a finding may be of clinical significance, it increases the positive predictive value of the result.

Note that samples from patients without a history of foreign travel but where a parasite examination has been requested will receive an Enzyme Immunological Assay (EIA) for ***Giardia lamblia*** and ***Cryptosporidium parvum*** (No wet film will be performed). In terms of incidence and clinical significance, these are the most important enteric parasites found in New Zealand and their identification in stool samples is generally indicative of infection.

Please do not hesitate to contact me if you have any queries pertaining to the above changes.

Michael Addidle
Clinical Microbiologist
Pathology Associates Ltd
Ph: (07) 571 7014

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