

## Lababstract – February 2007

### *Entamoeba histolytica/dispar* differentiation test

To Health Care Providers:

It has been established that *Entamoeba histolytica* actually consists of two morphologically similar but discrete entities:

- *E. histolytica*, which is capable of tissue invasion and
- *E. dispar*, which is a non-pathogenic endo-commensal.

*Entamoeba histolytica* is believed to infect a relatively small percentage of individuals who are diagnosed as having *E. histolytica* infections on the basis of trophozoite and cyst morphology alone. Treatment of the non-pathogenic *E. dispar*, which constitutes most of these cases, is unnecessary.

At Ontario Public Health Laboratory (OPHL), an ELISA-based faeces antigen test has been extensively evaluated for the discrimination of the pathogenic *Entamoeba histolytica* from the non-pathogenic *Entamoeba dispar*. This procedure uses a monoclonal antibody to *Entamoeba histolytica* galactose adhesin to specifically detect this pathogen in fresh faecal samples. The test is now a standard reference procedure at the OPHL.

#### Criteria for Acceptance of Specimens

This differentiation test is performed only as a follow-up to a diagnosis of *Entamoeba histolytica/dispar* infection, based on microscopy of an SAF-preserved faecal specimen. The purpose of this test is limited to the differentiation of the two species. Therefore, specimens for this test should not be submitted if:

- i) the patient has not recently been diagnosed as *E. histolytica/dispar* positive by microscopic examination
- ii) the patient currently is being or recently has been under treatment for *E. histolytica*
- iii) the patient becomes symptomatic after treatment (if recrudescence of the parasite is suspected, submit an SAF-preserved faeces specimen for microscopic diagnosis of infection).

#### Procedure for Submission of Specimens

Provide a specimen of approximately 1g of unpreserved faeces from the patient. SAF-preserved specimens are not suitable for this test. On the requisition indicate the report number(s) from the microscopic diagnostic tests and include "*Entamoeba histolytica/dispar* differentiation" as the reason for testing. The code for this test is "P02" (Parasitology Special Procedures).

Submit specimens to the OPHL within 24 hours of collection. If immediate transportation is not possible, keep specimen refrigerated or frozen.

***Entamoeba histolytica/dispar* differentiation test (Continued)**

**For further information:**

- Contact the PHOL Customer Service Centre at 416-235-6556 or toll free at 1-877-604-4567, or via email at [customerservicecentre@oahpp.ca](mailto:customerservicecentre@oahpp.ca)
- For the PHOL Specimen Collection Guide and previous Labstracts, refer to <http://www.oahpp.ca/services/public-health-laboratories.html>
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