

# Amoeba

## General:

Amoeba belong to the parasite group of protozoa (rhizopoda). *Entamoeba histolytica* infection occurs through fecal contamination or orally from contaminated food, drinks or bath water. The incubation period is 1 week up to several years (!). Amoeba-infected persons can eliminate infectious cysts (minuta forms). However, symptoms do not necessarily need to be present. The infection can go unrecognized for years, spontaneous recovery or sudden outbreak of the disease is possible, the more aggressive magna form (tissue form) appears in stool. The **clinical symptoms** are constipation, abdominal cramps, dysenteric syndromes, bloody diarrheas, intestinal ulcers, extraintestinal amoebiasis or liver abscess formation. Other kinds of amoeba (*Entamoeba coli*, *E. buetschlii*, *Endolimax nana*, *E. hartmanni*, *Dientamoeba fragilis*) are also found in the intestine and are detectable in stool; however, they are asymptomatic.

The following tests are available:

- **Amoeba IgG antibodies**

## General:

Invasive amoebiasis stimulates the immune system with formation of antibodies. Antibodies are detected in extraintestinal amoebiasis in up to 95% of the cases; in amoeba hepatic abscesses, IgG-Abs appear 3-4 weeks after clinical manifestation.

Indication: Clarification of intrahepatic abscess

Material: 1 ml serum

TAT: 7-10 days\*

Method: IFT

Unit: Titer

Ref.- range: < 1:20

- **Entamoeba histolytica antigen in stool**

Material: 5 g stool

TAT: same day, FML

Method: EIA

- **Amoeba detection in stool<sup>^</sup>**

Indication: suspicion of amoebiasis in case of bloody slimy stools particularly after travelling abroad in warm and tropical zones, differential diagnosis of liver abscess.

Material: 5 g stool

Preanalytics: Stool container filled to max. 1/3; fresh stool for cysts; for magna forms formalin-fixed stool if possible. The examination of 3 stool samples on 3 different days is recommended for more accurate diagnostics.

TAT: same day, FML

Method: Direct or enrichment for microscopy

Note: Must be at the lab within 2 hours maximum

- **Entamoeba histolytica DNA in stool**

Material: 5 g stool

TAT: 10-14 days\*

Method: PCR

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit  
<http://www.fml-dubai.com/parameter-listings/>