

1. Introduction

This guideline is intended for use by medical, nursing and pharmacy staff involved in the care of adult patients presenting with acute colitis.

Entamoeba histolytica is a protozoan parasite pathogenic to humans. Transmission is by the faeco-oral route although sexual transmission has been documented. It is endemic in South and Central America (including the Caribbean), Africa and Asia (including Egypt and Turkey). Patients who have travelled to these regions, and their household/sexual contacts are at risk of acquisition. The incubation period may range from days to years.

Although most cases of *E. histolytica* infection are asymptomatic, colitis and invasive extraintestinal infection can occur. Amoebic colitis can present in a clinically similar manner to inflammatory bowel disease (IBD). It is important to consider and, if appropriate, investigate and treat for amoebic infection in patients with IBD-like symptoms and signs before commencing immunosuppressive therapy for IBD as immunosuppression may worsen amoebic infection leading to fulminant colitis.

2. Scope

This guideline applies to all staff members and clinical areas assessing and managing patients presenting with colitis. Majority of these patients will be managed within gastroenterology but a small number may present to the Emergency Department, medicine or surgery.

3. Recommendations, Standards and Procedural Statements

Patient Selection

All patients with new onset colitis should be tested for *Entamoeba histolytica* as part of their initial investigation.

Patients with known colitis with a previous negative PCR and serology result do not require re-testing unless they have travelled to an endemic area or had contact with a case of *Entamoeba histolytica* since the previous negative test.

Investigations required for *E. histolytica* testing

Request and send the following samples:

- Stool sample for *Entamoeba histolytica* PCR. This needs to be written on the request form.
- Blood serum sample for amoebic serology.

These tests must be requested in addition to other microbiological investigations for colitis such as *C. difficile* toxin, stool cultures and microscopy for ova, cysts and parasites (if there is relevant travel history). Please include dates and location of travel on the request form.

Reviewing results and empirical therapy

A positive *E. histolytica* PCR result would indicate infection (asymptomatic or invasive) and requires treatment. Asymptomatic infection has the potential to progress to invasive disease and risks spread to household contacts.

A positive amoebic serology result could represent current or previous infection.
For test turnaround times, please refer to the Clinical Microbiology Handbook.

In patients with new onset colitis requiring immunosuppression, discuss with gastroenterology regarding the need for immunosuppressive therapy to commence prior to *E. histolytica* results.

If immunosuppression is urgently required, start:

Metronidazole 800mg TDS PO for 10 days.

Stop if the *E. histolytica* PCR result is negative.

Oral metronidazole is the preferred route. If the patient is nil by mouth or there are concerns regarding absorption, IV metronidazole may be used:

Metronidazole 500mg TDS IV for 10 days

If metronidazole is contraindicated, discuss alternative treatment with microbiology.

If stool *E. histolytica* PCR is positive, complete the 10-day course of metronidazole then prescribe **paromomycin*** for intraluminal carriage eradication.

Paromomycin 25 to 30mg/kg/day orally in three divided doses for 7 days is recommended.
Please see table below for suggested dosing schedule.

Weight (kg)	50-70	71-90	91-110	111-130	131-150
Morning	500mg	750mg	1000mg	1000mg	1250mg
Lunch	750mg	750mg	750mg	1250mg	1250mg
Night	500mg	750mg	1000mg	1000mg	1250mg

If *E. histolytica* PCR is negative but the serology comes back positive, discuss with microbiology.

* Paromomycin is an unlicensed drug in the UK.

4. Education and Training

None

5. Monitoring and Audit Criteria

Key Performance Indicator	Method of Assessment	Frequency	Lead
<i>E. histolytica</i> testing	Audit	36 monthly	Dr Patricia Hooper
Metronidazole and paromomycin prescribing	Audit	36 monthly	Dr Patricia Hooper

6. Supporting Documents and Key References

1. UpToDate accessed 15/9/2023 [Intestinal Entamoeba histolytica amebiasis - UpToDate](#)
2. Interim Public Health Operational Guidelines for Amoebiasis [Interim Public Health Operational Guidelines for Amoebiasis \(publishing.service.gov.uk\)](#)

7. Key Words

Colitis, Entamoeba histolytica

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