

**CASE 87**

**HPI:** A 31-year-old woman attends the clinic complaining of watery diarrhea for the past 14 days. She complains of approximately four loose, foul-smelling stools daily. The patient has mild cramping abdominal pain, but denies blood or mucus in her stool. She has had no fever or vomiting. She returned from a business trip to South America 2 weeks ago.

**Vital signs:** Temperature 97.7° F (36.5° C), pulse 90 beats/min, BP 122/82 mm Hg, RR 17 breaths/min.

**Additional history:** No medical history. No tobacco, alcohol, or drug use.

**1. What is the differential diagnosis?**

Giardiasis, amoebiasis, traveler's diarrhea, foodborne illness, intestinal parasitism, *Clostridium difficile*.

**2. What components of the physical examination do you perform?**

General appearance, skin, lymph nodes, HEENT, cardiovascular, lungs, abdomen, genitalia, rectal, extremities, neuro/psych.

**Physical examination:**

General: No acute distress.

Skin/lymph nodes/HEENT: WNL

Cardiovascular: WNL

Lungs: WNL

Abdomen: Hyperactive bowel sounds; no tenderness, rebound, or guarding.

Genitalia/rectal: WNL

Extremities: WNL

Neuro/psych: WNL

**3. What are your initial orders?**

Pulse oximetry, fecal WBCs, stool ova and parasites, stool culture, stool *Giardia* antigen, *C. difficile* toxin, counseling (including oral hydration).

**Advance clock:**

*Giardia* antigen positive, stool ova and parasites positive for *Giardia*, other laboratory tests WNL.

**4. What are your follow-up actions?**

Metronidazole PO, counseling, oral hydration, follow up in 2 weeks.

**Advance clock:**

Case ends.

**Critical actions:**

Abdominal examination, stool ova and parasites, metronidazole, counseling.

**Discussion:**

This patient has diarrhea after travelling abroad. Infectious sources should be at the top of your differential diagnosis. Most cases of diarrhea are due to viral illness. Viral gastroenteritis is usually self-limited and does not necessitate any laboratory evaluation. In this case, the prolonged time course and associated cramping indicate a possible parasitic cause and should trigger a laboratory evaluation with stool studies. This patient's studies are positive for *Giardia*, which can be treated with metronidazole. A similar case presentation may appear for many patients with infectious diarrhea. The physical examination and laboratory evaluation are all the same. If this patient happened to be positive for *Entamoeba histolytica*, the treatment would be the same (metronidazole). If the case were consistent with enterotoxigenic *E. coli* (2 to 4 days of profuse watery diarrhea while travelling), the patient could be treated with ciprofloxacin. If it were most consistent with a viral cause, the patient could be treated with oral hydration alone.

**Diagnosis:** Acute diarrhea due to giardiasis

**CASE 88**

**HPI:** A 25-year-old woman attends the ED with severe abdominal pain in the left lower quadrant and scant vaginal bleeding that has progressively worsened over the past 5 hours. She has never had similar symptoms before. She denies fevers, vomiting, and diarrhea.

**Vital signs:** Temperature 98.2° F (36.8° C), pulse 110 beats/min, BP 100/70 mm Hg, RR 18 breaths/min.

**Additional history:** No medical history, sexually active with one male partner.