Travelers' Diarrhea

Traveling to areas of high risk (developing countries in Latin America, Africa, Middle East, Asia) and/or to areas of intermediate risk (countries in southern Europe or some Caribbean islands)?

YES

NO → No further action necessary.

Educate

Educate traveler regarding:

- Risks from eating and drinking local food and beverages.
- Strategies for obtaining reliable drinking water.
- How to self-diagnose TD, and dietary management if TD occurs.
- Importance of oral rehydration and use of ORS if needed
- Lack of need for antibiotic prophylaxis for TD except in rare circumstances
- Lack of need for vaccine prophylaxis for TD except in rare circumstances (not available in the U.S.)

Self-Treatment: Antimotility Drugs

- Advise regarding potential self-treatment with antimotility drugs (contraindicated for persons < 3 years of age):
  - Take 4 mg loperamide.[1] If mild diarrhea continues, take additional 2 mg loperamide every 6 hours, not to exceed 8 mg/day for over-the-counter use or 16 mg/day for prescription use.[2]
  - Do not use if there is blood or pus in the stool.
  - Stop use if symptoms continue after 48 hours of treatment.
- Advise regarding hydration:
  - If no clinical symptoms of dehydration, take regular fluids by mouth and eat salty crackers.
  - If profuse diarrhea or symptoms of dehydration, use ORS.

Does diarrhea respond to use of antimotility drug within 3-6 hours?

YES → No additional intervention necessary.

NO

Consider use of empiric antibiotics for severe diarrhea.[3]

Self-Treatment: Empiric Antibiotics

- In most cases, a single dose of a quinolone antibiotic (ciprofloxacin, levofloxacin, and ofloxacin are equivalent for TD) is likely to be adequate, even for severe diarrhea. If symptomatic after 24 hours, continue antibiotic for 2 more days.
  - Azithromycin[4] should be considered if quinolone is contraindicated or if TD is acquired in areas with high rates of quinolone resistance (e.g., Thailand, India). A single dose is likely to be adequate even for severe diarrhea. If symptomatic after 24 hours, continue antibiotic for 2 more days. A full 3-day course of treatment is required for dysentery (bloody diarrhea).
  - Rifaximin is an alternate therapy if *E. coli* is the most likely pathogen and there is no fever or bloody diarrhea.
- Although 1 dose of antibiotic is usually effective, prescribe adequate quantity for full 3-day course of treatment.
- If no response to 3 days of antibacterial therapy or if significant clinical worsening before 3 days, consider parasitic etiology and seek medical care.

Educate traveler about risks, side-effects, and benefits of drug use.

[1] For children > 3 years of age, if lopermide is to be used, dose at ≤ 0.25 mg/kg/day. (See *Travelers' Diarrhea* and *Children and Travel*.)

[2] Taking higher than the recommended dose of loperamide can cause cardiac adverse events. Significant overdoses may result in death.

[3] What constitutes "severe" diarrhea is subjective; however, knowing that antibiotic use contributes to antibiotic-resistant infections may encourage travelers to adhere to preventive measures and recommended symptom management. For bloody diarrhea azithromycin should be started and medical attention sought immediately.

[4] Exercise caution when prescribing azithromycin, especially in persons with cardiac conditions given the possibility of QT prolongation and its recent link to cardiac-related deaths.