

Diarrhea

Traveler's diarrhea is a potential problem for any traveler, particularly those visiting the developing world where endemic disease and poor hygiene standards can facilitate the transmission of infection. Traveler's diarrhea, however, is not a specific disease. The term describes the symptoms of intestinal disturbance caused by infection with certain bacteria, parasites or viruses, transmitted by consumption of contaminated food or water. It can also be due to inflammation as a result of consuming unfamiliar food or drink.

Microorganisms commonly associated with the development of traveler's diarrhea include campylobacter jejuni, salmonella, shigella, giardia lamblia, and parasitic amoebae.

The first line of defence is the prevention or treatment of fluid and electrolyte depletion, particularly in infants and the frail and elderly. Oral rehydration solutions enhance the absorption of water and electrolytes and replace the electrolyte deficit adequately and safely. They contain an alkalinizing agent to counter acidosis, and are slightly hypo-osmolar (about $250 \text{ mmol} \cdot \text{L}^{-1}$) to prevent the possible induction of osmotic diarrhea. The World Health Organization (WHO) recommends a specific formula for this solution, to be used flexibly by giving extra water between drinks of oral rehydration solution. Commercially available rehydration solutions used in the developed world are lower in sodium than the WHO formulation (1). The adult dose is normally 200-400 ml of solution after every loose bowel movement.

Antimotility drugs relieve symptoms of acute diarrhea, but fluid and electrolyte replacement are of primary importance. Loperamide can be used as an adjunct to rehydration in acute diarrhea in adults and children over 4 years. The dose is 4 mg initially, followed by 2 mg after each loose stool for up to 5 days, with a daily maximum of 16 mg (half the dose in children) (1).

Antibacterial drugs are generally unnecessary in simple gastroenteritis, even when a bacterial cause is suspected, because the symptoms will usually resolve quickly without such treatment. Ciprofloxacin is active against both Gram-positive and Gram-negative bacteria, including salmonella, shigella, campylobacter, Neisseria and pseudomonas. The usual adult dose is 500-750 mg twice daily. Ciprofloxacin is occasionally used as prophylaxis against traveler's diarrhea, but routine use is not recommended because of the risk of developing bacterial resistance (1).

Diarrhea sufficiently severe to interfere with work or normal activity must be reported to the port health authority or to the public health service nearest to the airport of arrival.

REFERENCES:

1. Treatment of diarrhea. British National Formulary 2001; 42:45-6; 287-8; 443-4.