

TRAVELLERS' DIARRHOEA

Diarrhoea is by far the commonest cause of ill health among travellers. All too often, a dream holiday, especially to a tropical country, is spoiled within a few days of arrival because of traveller's diarrhoea. The severity of the diarrhoea varies from person to person but even a relatively mild diarrhoea, with a few loose stools a day, can ruin the well-planned safari to a game park or beach. Travellers' diarrhoea is a clinical syndrome which is usually associated with visitors travelling from Europe, USA and Australia to Africa, Asia or South America, but even local travellers are affected. City dwellers who visit their "up-country" homes and domestic tourists, business travellers and conference participants travelling to various local holiday destinations are all at risk.

What causes travellers' diarrhoea?

Surprisingly, no causative organisms are found in about half the cases of travellers' diarrhoea. This is probably because a sudden change in the environment, especially the diet, can expose you to a new variety of bacteria or "normal flora" in your intestine which may trigger off an uncomplicated attack of diarrhoea. Some people are more susceptible to this change than others. An examination of a stool specimen in such cases does not reveal any unusual organisms, even if the stool is loose.

However, several disease-causing organisms have been found to be associated with travellers' diarrhoea in varying frequencies. These organisms, found in the faeces of infected persons, thrive in faecally contaminated food and drinks or can be transmitted by flies landing on food or through contaminated hand-shakes. Unwashed hands can inadvertently carry the organisms to the food or to the mouth. Often, the infected food handlers are asymptomatic "carriers" of the disease and may easily contaminate foods.

1) Bacteria and viruses

Infection with different species of *Shigella* bacteria can cause bloody, mucoid diarrhoea with cramps and sometimes fever. Although most travellers to the tropics have been vaccinated against typhoid, which is caused by *Salmonella typhi*, other non-typhoid *Salmonella* species can lead to severe diarrhoea, as can other bacteria such as *Campylobacter*, *Vibrio* (cholera) and disease-causing strains of the normal *Escherichia coli* bacteria. Infection with viruses such as the rotavirus, can also cause an acute diarrhoea, particularly in very young children.

2) Parasites

Parasitic infections of the gut are very common in many parts of the tropics and can infect newcomers quickly via contaminated food or drinks. An infection with a parasite can lead to considerable discomfort over a long period of time. Obvious symptoms are not usually as acute as those which are associated with bacterial or viral infections because the life cycle of parasites is more complex. It normally takes a few days from the time of being infected to the onset of symptoms. The single-celled, or protozoan

parasites of the gut, are easily acquired in an unhygienic environment. There are several types of amoebae, the most harmful (potentially) being *Entamoeba histolytica*, the organism responsible for amoebic dysentery. Giardiasis is caused by a protozoan parasite called *Giardia lamblia*, which is a common parasite of young children in the tropics, but in a traveller, can cause a nasty diarrhoea with pale, floating stools. Long-term infection with *Giardia* can lead to significant weight loss. Another intestinal parasite which is known to cause an acute diarrhoea is *Cryptosporidium*. Several other species of protozoa, including the very common *Blastocystis hominis*, may cause abdominal discomfort (gas, bloating) with occasional loose stools.

Infection with worms can also affect travellers but the symptoms of a worm infection tend to be more chronic and worms are not listed as a main cause of travellers' diarrhoea.

What are the risk factors for travellers' diarrhoea?

Persons travelling from industrialised countries to poorer countries are most at risk. Younger travellers keen to try out local foods and street-side delicacies are more likely to suffer from travellers' diarrhoea, especially if they are new to the destination. Studies have shown that travellers who eat out in restaurants are most at risk. Food and drinks which are prone to contamination via infected food handlers, include cold salads and desserts, juices, yoghurts, water and also re-heated foods. In general, the warmer the climate the higher the risk of diarrhoea, especially where hygienic conditions are already poor.

How can travellers' diarrhoea be prevented?

Someone who is visiting the tropics as a complete newcomer should try not to be too adventurous with new foods and should avoid eating cold or re-heated foods or taking drinks which may have been prepared by hand (squeezed fruit juices). Fruits should be peeled before eating and hands should be washed frequently. Avoid unhygienic eating places, suspicious salads and raw shellfish. Any drinking water, ice cubes, ice creams, milk or milk products of dubious origin should be avoided. Flies must be kept off all foods.

Specific antibiotics for preventing diarrhoea may be recommended for certain high risk travellers but not on a long-term basis. Before a journey, travellers' should ensure that their vaccinations against preventable diseases are up-to-date.

Treatment of travellers' diarrhoea

Severe cases of travellers' diarrhoea may need to be treated with antibiotics, especially if the diarrhoea is mucoid or bloody and the patient has fever, muscle aches or headaches. Others may need treatment with anti-amoebic drugs. In about half the cases, diarrhoea will spontaneously disappear and symptoms can be alleviated with self-administered oral rehydration fluids. Stubborn diarrhoea can be alleviated temporarily by Loperamide on long journeys. In case of severe vomiting, consult the available medical personnel.

