

In each issue Dr. James Kennedy considers a common medical problem and summarises the pragmatic evidence-based advice that can be offered to people wanting to look after themselves.

## SELF CARE OF ACUTE DIARRHOEA IN NON-TRAVELLING ADULTS

**Key Words:** Adult diarrhea, Adult diarrhoea, oral rehydration, Loperamide, Probiotics,

### INTRODUCTION

Acute diarrhoea is a common experience even among otherwise healthy adults resident at home in the developed world. Although episodes are usually brief and self-limiting, the symptoms can be distressing and disrupt normal activities. As a result people sometimes take time off work or lose leisure time waiting for symptoms to resolve. There is often a reluctance to treat symptoms and many prefer to let nature 'take its course'. Sometimes this is as a result of mistaken beliefs relating to diarrhoea itself or to the effects of available treatments.

Additionally, people are often confused as to what, if anything, they should eat to assist their recovery. Although most know they should 'drink plenty', they are often unclear what they should be drinking 'plenty' of. Finally there are symptomatic treatments for diarrhoea widely available in most countries and consumers may seek advice on when and how to use them.

### RECOGNISING WHEN TO SEEK ADVICE

In otherwise healthy adults in developed countries, most episodes of acute diarrhoea (i.e. the sudden onset of increased bowel action with loose or watery stools) do not require investigation or medical intervention.

However, there are occasions when medical advice is necessary. The symptoms which indicate that a medical opinion should be sought are listed in Table 1 together with the groups of adult patients best managed under the care of a doctor.

Table 1: Reasons to Seek Medical Advice In Adults	
WARNING SYMPTOMS OR SIGNS	THOSE WITH:
<ul style="list-style-type: none"> <li>• High fever (beyond 38.5 °C)</li> <li>• and/or frank blood in stools indicates 'dysentery' and should be managed by a physician</li> <li>• Severe vomiting which could lead to rapid dehydration</li> <li>• Obvious dehydration.</li> <li>• Severe abdominal pain or tenderness</li> </ul>	<ul style="list-style-type: none"> <li>• Immune deficiency</li> <li>• Significant systemic illnesses</li> <li>• Recurrent diarrhoea due to chronic bowel disease</li> <li>• The frail or elderly (&gt; 75 years)</li> <li>• Pregnant women</li> <li>• People returning from recent foreign travel</li> </ul>

## **SELF CARE**

Episodes of acute diarrhoea typically resolve over the course of several days even when no action is taken. But this does not mean that they are trivial or that they should not be treated, especially if they impact on the quality of life.

There are many folk beliefs about diarrhoea that can influence how people care for themselves, and we explore these below.

## **DIETARY ADVICE**

Most people know the importance of maintaining an adequate fluid intake, but not necessarily what drinks are preferable when suffering from diarrhoea. Oral rehydration solutions were developed for cholera treatment and have saved the lives of many children in developing countries. These solutions are sometimes recommended for adults, but there is no evidence that they relieve symptoms or shorten the illness, so the only reason to take them is to replace lost fluid and electrolytes. However in otherwise healthy adults with diarrhoea, fluids containing glucose (e.g. fruit juices) and soups (rich in electrolytes) are adequate substitutes in this regard. Drinks containing diuretics and stimulants such as caffeine are best avoided as they increase bowel activity, and the volume of fluids required should be guided by thirst rather than by a fixed routine.

There is no evidence that fasting or avoiding solid food in adults helps recovery from diarrhoea. In fact the solutes in food may have the same effect as solutes in oral rehydration solutions in helping to restore net fluid absorption. However, if diarrhoea is accompanied by nausea and vomiting, it is sensible to avoid eating until this passes. Also large meals can trigger the gastro-colic reflex to pass faeces and are best avoided when the gut is already overactive. Fatty, spicy and heavy meals can provoke worsening symptoms in some, so small, light meals are preferable. Aside from these considerations there is no need to avoid solid food and the sufferer can be guided by their appetite.

## **TO TREAT OR NOT TO TREAT**

There is a prevalent belief that diarrhoea is a 'defence mechanism' whereby the body rids itself of pathogens or toxins. The logical extension of this belief is that medicines which act to reduce stool production will somehow keep these noxious materials in the body and potentially worsen or prolong the illness. This belief ignores the fact that many episodes of diarrhoea do not have an infective origin. Even when there is an infective cause, it is difficult to see how diarrhoea itself could have a beneficial effect on virus-induced mucosal injury or effects caused by pathogens attached to, or toxins bound to the gut wall. Nevertheless, in a society that can ascribe 'de-toxifying' properties to colonic irrigation, such a belief is not easily eroded.

Many people are content to allow episodes of diarrhoea to resolve without treatment because they are not distressed by the symptoms (provided they are near to a bathroom). However

others may have commitments which cannot be met if diarrhoea and the accompanying symptoms (including urgency and discomfort) are not controlled. The need for treatment should be decided on pragmatic grounds but there is no advantage to be gained from not treating symptoms which are causing distress, or severely limiting life commitments.

### **CHOOSING A TREATMENT FOR SELF CARE**

As discussed, in otherwise healthy adults, oral rehydration solutions are unnecessary and have no impact on symptoms.

Probiotics, including various *Lactobacillus*, *Bifidobacterium* and *Streptococcus* species and the yeast *Saccharomyces boulardii* are sometimes promoted for 'gut health' and in some countries are used in diarrhoea. However there is no good evidence that probiotics have a role in treating the symptoms of idiopathic acute diarrhoea in adults.

The priority in treating acute episodes of diarrhoea in adults is to reduce the frequency of stools and improve associated discomfort and urgency so that normal activity can be resumed. In these circumstances the obvious choice is a drug that affects motility or secretion or both. The most studied drug is loperamide 2 mg (dosed according to loose bowel movements) and there is good evidence that this drug will diminish both the number of loose stools and the associated symptoms of diarrhoea.

There is no evidence that reducing the volume of stools in adults prolongs the disorder. On the contrary, the balance of evidence suggests that anti-motility/anti-secretion medication may diminish diarrhoea and shorten its duration, even if the cause is non-dysenteric infectious diarrhoea (i.e. without high fever or blood in the stools).

In most episodes of acute diarrhoea in non-travelling adults, the cause remains unknown because the symptoms are self limiting and not investigated. However bacterial pathogens, viruses and non-infectious factors may all be implicated. Because of this diagnostic uncertainty, and the generally benign nature of the illness in otherwise fit adults at home, antibiotics have no place in the self-management of diarrhoea.

Patients with dysentery should always consult a clinician (Table 1) and those whose symptoms worsen or continue unimproved past 48 hours might also have an infectious cause that could benefit from investigation and potentially from prescribed antibiotics.

### **CONCLUSION**

Acute diarrhoea in otherwise fit adults is a relatively uncommon cause for consultation in modern general practice in the developed world. This is as it should be, since most episodes are self-limiting and the bother of attending a surgery outweighs any possible benefit.

Consequently, most adults will manage diarrhoea at home. However there are many prevalent

'folk beliefs' surrounding the condition and people may make their lives more difficult than they need to be by unnecessary dietary restrictions and reluctance to take symptomatic treatments. Simple pragmatic advice and, when necessary, the use of the effective treatments available could alleviate much unnecessary suffering and help prevent loss of work or leisure time.

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The information and advice in this article is based on the following sources:

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