



Infection Prevention & Control Team

Clostridium difficile associated diarrhoea

Information for parents & carers

Introduction

This leaflet is aimed at providing parents and carers with information about a condition called Clostridium difficile associated diarrhoea (CDAD).



What causes this condition?

Clostridium difficile is a type of bacteria (germ) that is carried harmlessly in the gut in 75% of infants under the age of 2 years and up to 10% of children from the age of 2-15 years. It is the commonest cause of antibiotic associated diarrhoea, but is extremely rare in children.

Clostridium difficile causes disease when the normal bacteria in the gut are killed by taking antibiotics. This allows *C. difficile* to grow to unusually high levels, and produce a toxin (poison). The toxin is neutralised by healthy immune systems, and diarrhoea normally only occurs in immune-compromised children, such as those being treated for cancer or those with inflammatory bowel disease.

What are the signs and symptoms of Clostridium difficile?

Clostridium difficile causes diarrhoea (mild to severe), fever, loss of appetite, nausea and abdominal pain or tenderness. Rarely *C difficile* causes life threatening inflammation of the intestines predominantly in adults.

Who is at most risk of developing Clostridium difficile associated diarrhoea?

Clostridium difficile associated disease is very rare in children, and generally only diagnosed in children who are immuno-compromised such as those receiving chemotherapy for cancer. Multiple courses of antibiotics and medication, such as antacids, are associated with an increased risk of the disease.

How is Clostridium difficile associated diarrhoea diagnosed?

Diagnosis is based on the presence of the toxin (poison) in the stool (poo) and the presence of diarrhoea. The bacterium isn't routinely grown in the laboratory.

It may be also be diagnosed during endoscopy by the presence of characteristic yellow plaques or pseudo-membranes that form on the inner wall of the colon.

What treatment(s) are available?

The disease can be treated with antibiotics.



Are there any implications for others i.e. infecting other people?

Clostridium difficile bacteria produces spores when they are exposed to the air. These spores can be transmitted on the hands of healthcare workers or on patient equipment if it isn't cleaned thoroughly. The spores are then ingested and germinate in the bowel. Patients with this condition should be isolated in a single room under contact isolation precautions whilst they continue to have diarrhoea.

Are there any common problems that may occur?

The toxin produced by the bacteria as it multiplies in the gut causes inflammation which leads to diarrhoea. On rare occasions, the inflammation of the gut can lead to dilation (toxic megacolon) or even perforation of the gut requiring surgery, predominantly in adults.

What are the risks to other family members?

Fit healthy individuals are not at risk of developing disease.



Who to contact for further information or support?

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

The Infection Prevention and Control Team in the hospital can also be contacted on the number below:

Infection Prevention & Control Nurses: 0151 252 5485

This information can be made available in other languages and formats if requested.

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