

Clostridioides difficile Infection

Introduction

This leaflet provides information for patients who have been diagnosed as having *Clostridioides Difficile* Infection (CDI). While not all patients with diarrhoea in hospital have CDI, diarrhoea is the main symptom. Anyone in hospital suffering from diarrhoea should tell a doctor or nurse straight away. If you are found to have CDI, please make sure that those caring for you at home read this leaflet.

What is Clostridioides difficile?

Clostridioides difficile is often shortened to *C. difficile* or *C. diff.* It was previously known as *Clostridium difficile*. It is a type of bacteria (bug) which can be found in the gut of about 5% of the population without causing any diarrhoea. This is because the bug is normally kept under control by the 'good' bacteria present in the gut.

However, if the number of good bacteria is reduced, for example by taking antibiotics, *Clostridioides difficile* can multiply quickly and produce toxins (poisons) which can inflame the gut and cause diarrhoea. The *Clostridioides difficile* bacteria are passed out in the faeces of an infected person. Once outside the body, they change to the spore form which can survive in the environment (surroundings) for a long time.

How do you catch Clostridioides difficile?

Clostridioides difficile spores may be transferred to patients' hands from contact with a contaminated environment or hands of other patients, visitors or staff who have touched a contaminated surface such as furniture, medical equipment, toilets, handles, sinks or taps. If the hands are not washed before eating or drinking, these spores can be ingested (swallowed) and can reach the gut and cause diarrhoea.

Usually, the patient will be taking or will have recently been taking antibiotics for another infection.

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If you are taking antibiotics and develop diarrhoea please make sure you tell your doctor as soon as this happens. Ask your doctor for advice as to whether you should continue to take the antibiotics and if any other actions are necessary.

Who is most at risk of getting CDI?

People are more at risk of developing *C. difficile* infection (CDI) if they:

- are over 65 years
- are taking, or have recently taken antibiotics
- have an immune system that is not working properly
- have spent a long time in hospital as this increases the chance of picking up the bug from the environment or other people
- have a serious underlying illness
- have had gut surgery or a procedure involving the gut

What are the symptoms of CDI?

The most common symptoms of CDI are regular bouts of watery diarrhoea. Most people with CDI have between 3 and 5 bouts of diarrhoea a day. This will have an unpleasant smell and may contain mucus or blood. If the CDI is severe the bouts of diarrhoea may be more often (between 10 and 15 bouts a day).

Other symptoms may include stomach cramps, fever, nausea (feeling sick), vomiting and loss of appetite. The loss of fluids caused by diarrhoea may lead to dehydration. You should drink every hour during the day to avoid this. Symptoms may last from a few days to several weeks.

Most patients will recover fully. However, some patients may become seriously ill and develop inflammation of the bowel (colitis).

If colitis is severe (pseudomembranous colitis) it can be lifethreatening.



How is CDI diagnosed?

CDI is usually diagnosed when a diarrhoeal stool sample is tested in the laboratory and is found to have *Clostridioides difficile* toxin. The result of this test is usually available within 48 hours. The doctor will check the test results and decide if they reflect genuine CDI or if there is another cause of the diarrhoea.

How is CDI treated?

If CDI is diagnosed, the doctor will decide on the appropriate antibiotic treatment. This is based on the severity of infection.

CDI is usually treated with Vancomycin or Fidaxomicin which are antibiotics effective against *Clostridioides difficile*. The medication is usually given by mouth and should start to work within a few days.

Milder cases of CDI may not need any treatment.

You may be given extra fluids by mouth or intravenously (into a vein) if you become dehydrated.

Your doctor may decide to stop some medicines that you are taking. This might include any antibiotics you are taking if they are not needed anymore or if it is felt that they could worsen the symptoms if continued.

Your condition will be monitored closely. The staff will record the number of times you have diarrhoea and the appearance of your bowel motions.

It is important that you complete the course of antibiotics for CDI even if your diarrhoea settles, otherwise symptoms may reoccur.

It is also important to let staff know if you feel your symptoms are not improving or are becoming worse.

If the diarrhoea does not get better your doctor will review and may change your antibiotics or discuss alternative treatments with you.



How will CDI affect my stay in hospital?

You will be nursed in a single room (isolation) while you have diarrhoea. Staff, carers and visitors will need to follow infection control precautions until your diarrhoea has stopped.

We do understand that being in isolation while unwell can be a difficult time, however it is important to prevent *Clostridioides difficile* spreading to other people. In most cases you will need to stay in a single room until you have stopped having diarrhoea for 48 hours and your bowel motions have returned to normal.

It is important to have good personal hygiene to stop your skin from becoming sore and to prevent the spread of *Clostridioides difficile*. Your dignity is also very important and you should not feel embarrassed to ask for help with personal care. If your skin becomes sore around your bottom you will need to use a barrier cream. This will protect your skin from coming into contact with diarrhoea. The staff caring for you will be able to provide this and will also check on your condition regularly. We would also ask that you try to limit the number of personal belongings in your room. This will help to keep the room free of clutter and make it easier for our staff to clean.

Please do not hesitate to ask a member of staff if you do not understand what is happening. The staff are there to help and care for you and answer any questions that you or your relatives may have. If you have any concerns please speak to the nurse in charge.

Alternatively, you can ask the ward staff to contact the Infection Prevention and Control team who can answer any further questions.

What infection control precautions will need to be taken?

Hospital staff will wear disposable aprons and gloves and wash their hands with soap and water every time they attend to you. Alcohol gel or foam is not effective against *Clostridioides* difficile spores.

Clostridioides difficile spores are difficult to remove from the environment so special cleaning methods will be used.



Remember, you must wash your hands thoroughly with liquid soap and water after using the toilet and before eating or handling food. This will help to remove

C. difficile from your hands and reduce spread. You must also dry your hands using the paper towels provided in the room.

Please ask for help if needed. If you are unable to use a hand wash basin, you can use a hand wipe or a bowl of water to clean your hands. Please ask for hand wipes if not already provided.

If any carers wish to stay with you in hospital, they must follow the infection control precautions mentioned above.

Can patients with *Clostridioides difficile* have visitors?

Healthy people are unlikely to develop CDI but precautions must still be taken to prevent its spread. It is however advised that children under the age of 12 should not visit. Visitors should not attend if they are unwell or have recently had diarrhoea. If a visitor has had a recent infection or illness or has a problem that makes them more vulnerable to infection, they should check with the nurse in charge before visiting.

Visitors should:

- use the alcohol gel provided before they enter the ward and on leaving the ward
- wash their hands with soap and water at the hand hygiene sink before leaving your room
- it is not necessary for your visitors or carers to wear gloves and aprons unless they are helping you with personal care such as washing and dressing. After use, the gloves and aprons should be put into the orange bin in the room.
 Visitors must then wash their hands with soap and water
- if they are visiting other patients in the hospital it is best if they visit you last



Can people with *Clostridioides difficile* still send their washing home?

It is best to ask the staff to provide you with hospital nightwear while you have diarrhoea.

If you have any clothing that needs to be taken home to be washed, make sure that these items are washed as soon as possible and separately from your normal load. These items should be washed at 60°C. Take care not to overload the machine so that the water can circulate freely, as this will help to rinse away the germs.

The ward will provide special bags called 'Dissolvo Sacks'. These can be put straight into the washing machine. If these are not available, wash your hands with soap and water after handling soiled or used clothing. Clean the area around your washing machine, such as the door of the machine and worktops, with a kitchen cleaner that contains bleach. Tumble dry clothes where possible (following manufacturer's guidance), or iron according to manufacturer's guidance. A hot iron with steam is best, if possible.

When you go home

If you have been discharged from hospital but are still taking medication for your CDI, it is important to complete the course of antibiotic treatment even if you are feeling better and your diarrhoea has stopped.

When you go home continue with a normal healthy diet. You do not need to change your eating pattern.

Maintain a good hand hygiene routine. Wash your hands with soap and water after going to the toilet and before preparing and eating food. Use a liquid soap pump dispenser as a bar of soap can harbour germs.

- You can return to work if you have been free from diarrhoea for 48 hours
- If you need antibiotics for any other illness please make sure that your GP knows that you have had a Clostridioides difficile infection



 The Infection Prevention and Control team will send a letter to your GP informing them that you have had CDI on this admission

Can CDI come back?

There is around a 10% chance that your CDI may come back. This can happen up to 3 months following treatment. A very small number of people may suffer several relapses.

What should you do if the diarrhoea returns?

Contact your GP straight away if you develop diarrhoea after you are discharged from hospital. The discharge letter to your GP should state that you had a CDI while in hospital but make sure that you mention it to your GP as well.

Do not take any medicines to stop the diarrhoea (such as loperamide) without discussing with your GP. This is because it can prevent the infection being cleared from your body.

It is important to clean surfaces at home that may have been contaminated.

Clean surfaces in the bathroom regularly, in particular the toilet bowl, toilet seat and toilet flush handle, sink and taps. Clean with household detergent and bleach.

Soiled clothing and bedding should be washed separately from other items.

Remember to wash your hands well and dry them thoroughly after handling soiled items.

If you are readmitted to hospital or admitted to another hospital please tell a member of staff that you have had a *C. difficile* infection.



Contact information

If you need further advice please speak to the nursing staff on the ward. The Infection Prevention and Control Nurses will visit you while you are in hospital.

Further information

NHS UK

Website:

https://www.nhs.uk/conditions/c-difficile/

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