Carbapenemase-producing Enterobacteriaceae (CPE):

This information is for patients, relatives and carers. It explains what CPE is and how it affects us, how it spreads and what we can do to stop it spreading.

What are 'carbapenemase-producing Enterobacteriaceae' ?

Enterobacteriaceae are bacteria that usually live harmlessly in the gut of humans. This is called 'colonisation' (a person is said to be a 'carrier'). However, if the bacteria get into the wrong place, such as the bladder or bloodstream they can cause infection. CPE are Enterobacteriaceae which have become resistant to powerful antibiotics such as carbapenems and most other penicillin-like antibiotics.

Why does carbapenem resistance matter?

Carbapenem antibiotics can only be given in hospital directly into the bloodstream. Until now, doctors have relied on them to successfully treat certain 'difficult' infections when other antibiotics have failed to do so. Therefore, in a hospital, where there are many vulnerable patients, spread of these resistant bacteria can cause problems.

Does carriage of CPE need to be treated?

If a person is a carrier of CPE they do not need to be treated. As mentioned previously, these bacteria can live harmlessly in the gut. However, if the bacteria have caused an infection outside the gut then antibiotics will be required.

How will I know if I am at risk of being a carrier or having an infection?

Your doctor or nurse may suspect that you are a carrier if you have been in a hospital abroad, or in a UK hospital that has had patients carrying these bacteria, or if you have been in contact with a carrier elsewhere. If any of these reasons apply to you, screening will be arranged for you and you will be accommodated in a single room with your own toilet facilities at least until the results are known. Do ask your doctor or nurse to explain any of the processes to you in more detail at any time.

How will I be screened for CPE?

Screening usually entails taking a rectal swab by inserting it just inside your rectum (bottom). Alternatively, you may be asked to provide a sample of faeces. The swab / sample will be sent to the laboratory and you will normally be informed of the result within two to three days.

If the result is negative, the doctors or nurses may wish to check that a further two samples are negative before you can be accommodated on the main ward. These measures will not hinder your care in any way. If all results are negative no further actions are required.

Advice for patients who have a positive result

What happens if the result is positive?

If the result is positive, you will continue to be accommodated in a single room whilst in hospital. If you have an infection, you will need to have antibiotics. However, if there are no signs of infection and you are simply 'carrying' the bacteria, no treatment is required.

How can the spread of CPE be prevented?

Accommodating you in a single room, if the result is positive, helps to prevent spread of the bacteria. Healthcare workers must wash their hands regularly. They will use gloves and aprons when caring for you. The most important measure for you to take is to wash your hands well with soap and water, especially after going to the toilet. You should avoid touching medical devices (if you have any) such as your urinary catheter tube and your intravenous drip, particularly at the point where it is inserted into the body or skin. Visitors will be asked to wash their hands on entering and leaving the room and may be asked to wear an apron.

What about when I go home?

Whilst there is a chance that you may still be a carrier when you go home, quite often this will go away with time. No special measures or treatment are required; any infection will have been treated before you are discharged.

You should not restrict your lifestyle in any way; however a few sensible measures will prevent spread to others if you remain a carrier. Effective hand hygiene, keeping the toilet and bathroom areas clean, and using separate towels are the best ways to prevent spread. If you have any concerns you may wish to contact your GP for advice.

Before you leave hospital your doctor or nurse must give you a letter or card advising that you have had an infection or been colonised with CPE. This will be useful for the future and it is important that you make health care staff aware of it. Should you or a member of your household be admitted to hospital, you should let the hospital staff know that you are, or have been, a carrier and show them the letter / card.

What about my family and visitors?

There is no need for you to advise visitors that you are a carrier or have an infection, as long as hygiene measures are adequate. As the CPE bacteria can be passed on through touch, you and your visitors should practice good hand hygiene, which is proven to be simple and effective. If you have an infection, it is important to work with your healthcare worker at home to ensure that any discharge from a wound, for example, is contained within an appropriate dressing to prevent contamination of clothes or soft furnishings.

Where can I find more information?

The Public Health England website is another source of information: http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/CarbapenemResistance/

The hospital has an infection prevention on control team who are: Sheila Loveridge – Lead Infection Control Nurse Specialist; Sarah Prevett - Infection Control Nurse Specialist; a Consultant Microbiologist and Jo Thomas - Director of Infection Prevention and Control.

Should you have any further questions or concerns, please speak to a member staff caring for you or contact them directly.

Infection Prevention and Control Team - Tel: 01342 414341

Please ask if you would like this leaflet in a larger print or in an alternative format

Reference: Public Health England

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