Carbapenemase-producing Enterobacteriaceae (CPE) screening

I need screening to see if I am a carrier (or have an infection) – what does this mean?

Introduction

You have been told that you need to be screened for Carbapenemase-producing Enterobacteriaceae (CPE). The information in this leaflet answers the commonly asked questions.

What does CPE mean?

Enterobacteriaceae (also known as coliforms) are bacteria that usually live harmlessly in the gut of humans and other animals. This is called colonisation. However, if the bacteria get into the wrong place, such as the bladder or the bloodstream, they can cause infection.

Carbapenems are one of the most powerful types of antibiotics used to treat infections caused by Enterobacteriaceae. They are only used if other commonly used and less powerful antibiotics are not effective.

Unfortunately, some Enterobacteriaceae have developed resistance to these antibiotics. They do so by producing enzymes called Carbapenemases which destroy these antibiotics making them ineffective. Worryingly, CPEs are often resistant to other commonly used antibiotics such as penicillins and cephalosporings. It is therefore very difficult to treat infections caused by these bacteria.

Why do CPEs matter?

As mentioned before, there are very limited options for treating infections caused by CPE.

In a hospital where there are many vulnerable patients, the spread of CPE can cause problems.
Does colonisation with CPE need to be treated?

If a person is colonised with CPE, they do not need to be treated. However, they need to be isolated to prevent the spread of CPE to other patients. If the CPE cause an infection, the patient will need to be treated with antibiotics.

How am I at risk of being a carrier or having an infection with CPE?

Your doctor or nurse may suspect that you have been colonised if you have been in a hospital abroad, or in a hospital in this country that has had patients carrying these bacteria, or if you have been in contact with a colonised person elsewhere. If any of these reasons apply to you, you will need to be screened for CPE. Until the results are known you will stay in a single room with your own toilet facilities (if available).

How will I be screened for CPE?

A swab is taken from just inside your rectum (bottom). Alternatively, you may be asked to provide a sample of faeces. The swab or faeces sample will be sent to the laboratory. We may also take a number of swabs from certain areas, such as where the tube for your drip (if you have one) enters the skin. The results usually take 2 to 3 days. If the results are negative further samples will need to be taken. This will not delay your care.

What happens if the result is positive?

If the result is positive you will remain in a single room while in hospital. If you have an infection, you will be given antibiotics. However, if there are no signs of infection and you are simply carrying the bacteria, no treatment will be needed.
How can the spread of CPE be prevented?

Being cared for in a single room will help to prevent the spread of CPE. Healthcare workers will use gloves and aprons or gowns when caring for you. They will clean their hands after taking off their gloves and aprons.

You must wash your hands well with soap and water, especially after going to the toilet. You should avoid touching medical devices such as your urinary catheter tube (if you have one) and your intravenous drip, particularly at the point where it is inserted into your 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.

Further information

General information about the use of antibiotics can be found at [www.nhs.uk/conditions/antibiotics/](http://www.nhs.uk/conditions/antibiotics/)

If you would like any further information, please speak to a member of the staff looking after you.

Contact information

Infection Prevention and Control Team
Tel: 0300 422 6122
Monday to Friday, 9:00am to 4:30pm