



## **Mycobacterium Chimaera Infection associated with Heater Cooler Units used in heart surgery**

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Version 3

### **> About this leaflet**

You are considering, or have decided to have, heart surgery that will or may require the use of the heart and lung bypass machine. Your surgical team will discuss the risks and benefits of your proposed surgery with you and your family. These are detailed in the consenting process, which the surgical team will take you through.

This information leaflet is to provide you with information, in line with the NHS Duty of Candour, on the risk of an infection associated with your planned heart surgery caused by a bacteria called *Mycobacterium Chimaera*. This is a very rare but potentially serious infection.

The risk of infection has been linked to a device used to heat and cool the blood during some types of heart surgery. All the cases identified in the world to date have been linked to devices produced by one manufacturer. Tests on these devices in Europe and the UK have revealed growth of a type of bacteria commonly found in the environment, which does not frequently cause human infections. This bacterium belongs to a non-tuberculous *Mycobacterium* species. It is not Tuberculosis and does not spread from person-to-person.

### **> What is the risk of infection?**

The risk of contracting this infection is considered small. There have been no cases identified in Scotland. NHS England have estimated the risk for patients undergoing heart valve replacement or repairs to be 1 in 5,000. The risk to patients undergoing coronary artery surgery is estimated to be 1:100,000 patients operated on.

In the UK there have been no cases of infection in either heart transplant patients or patients undergoing valve surgery for congenital heart disease. However the number of these procedures is relatively small and there is less certainty around risk assessment in these groups. It is therefore felt that the level of risk of acquiring an infection due to *M Chimaera* is small and the risks of not undergoing potentially life-saving heart surgery are far higher.

### **What is NHS Scotland doing to reduce the risk of further infections?**

Following the identification of this possible risk, hospitals that undertake heart surgery have put in place extra precautions to reduce the chances of *Mycobacterium* infection. All cardiothoracic centres have now increased their cleaning and disinfection procedures for the heater/cooler units and are testing their devices for evidence of growth of microorganisms.

No cases of the infection have been found in the UK in patients who have had open-heart surgery since these measures were put in place. There is no evidence that extra antibiotics during surgery will offer any further protection. Your surgical team will discuss with you whether additional antibiotics would be required in your particular case.

## ➤ What will happen after my operation?

Your recovery will be monitored as part of your routine care. Further information on this infection will be given to you as part of your hospital discharge information.

### Will I get tested for this infection after my surgery?

The symptoms of this infection can take up to five years to appear. It is not possible to be tested to see if you will develop symptoms in the future. It is therefore important that you are aware of the symptoms of a Mycobacterium Chimaera infection and to see your GP if you develop any of these. Treatments for Mycobacterium Chimaera infection are available.

### What should I do when I go home?

If you are well and have no symptoms you do not need to do anything specific as a result of this situation. However, you should be aware of the symptoms, particularly because the infection can take up to five years after surgery to appear.

## ➤ What are the symptoms of Mycobacterium Chimaera?

Symptoms of an infection with this bacteria have many of the same features of other illnesses. Therefore, if you experience any of the following, while it is unlikely to be caused by this bacteria, it should be considered as a possibility that needs to be excluded when you are seen by your GP or other health care professional.

Symptoms to be aware of include:

- Unexplained fevers
- Unexplained weight loss
- Increasing shortness of breath
- Waking up with bed sheets showing signs of sweating (night sweats)
- Joint or muscular pain
- Nausea, vomiting or abdominal pain
- Abnormal levels of tiredness / fatigue
- Pain, redness, heat and / or pus around the surgical site.

There are many other causes for these symptoms so should you experience any of these there is no need to be alarmed – just report these to NHS 24 / your General Practitioner.

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