

Cardiothoracic Surgery

Pre-operative information about *Mycobacterium chimaera*

You are considering or have decided to have surgery. This surgery may or will require the use of the heart lung bypass machine (cardiopulmonary bypass machine).

The surgical team will discuss the risks and benefits of your proposed surgery with you and your family as part of the consenting process. This discussion usually takes place at the pre-operative outpatient assessment. But this may take place the day before surgery, or on the day of surgery for patients coming in as an emergency or via inter-hospital transfer.

This information sheet is to provide you with information on the risk of an infection with *Mycobacterium chimaera*. This was found recently to be associated with your planned surgery.

All hospitals have been informed by Public Health England (PHE) of this infection risk. It is associated with all heart and/or lung surgery that requires the use of a heart lung bypass machine.



Heater-cooler unit

During heart (and some lung) operations, your body will be cooled and warmed by the heart lung bypass machine. To do this, the bypass machine is connected to a heater-cooler unit. These used to be kept in the operating theatre.

At University Hospital Coventry and Warwickshire, we have now moved the heater-cooler units to outside the operating theatre. This has been done to minimise (and potentially eliminate) the risk of infection.

Tests on some heater-cooler units in Europe, United States and the UK have revealed growth of *Mycobacterium chimaera*. Tests have also showed the potential for growth of other organisms.

Mycobacterium chimaera

Mycobacterium chimaera is a type of bacteria that is common in the environment. It does not frequently cause human infections.

There have been reports of this bacteria causing serious, potentially life threatening infections. These are in very small number of patients having operations on their heart valves. In some cases, these infections happen several years after the operation.

Risks of infection

From NHS data since 2007, it has been estimated the risk of developing an infection with *Mycobacterium chimaera* is approximately 1 in 5,000 for patients:

- undergoing cardiopulmonary bypass for heart valve repair/replacement
- undergoing repairs of the aorta

For patients undergoing coronary artery bypass grafting this risk is less than 1 in 100,000 (Public Health England 2017).

These levels of risk are so small that surgery should not be delayed, as the risks of delaying surgery are greater than proceeding with surgery.

Reducing the risk of infection

All cardiothoracic centres, including our Trust, have now increased their decontamination procedures for heater-cooler units used in all heart and lung surgery. All centres are testing their heater-cooler units for evidence of growth of micro-organisms regularly.

There is no evidence that extra antibiotics during surgery will give any further protection to this organism in most cases. Your surgical team will discuss with you whether additional antibiotics would be required in your case.

Your recovery will be monitored as part of our routine care. If you have any further concerns or questions, please speak to your consultant.

If you require further information or have any questions about Mycobacterium chimaera and your treatment, please contact the Cardiac Liaison Team on 024 7696 5803.

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact 024 7696 5803 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

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