

Cardiothoracic Surgery

Pre-operative information about *Mycobacterium chimaera*

Introduction

You are considering or have decided to have surgery that will or may require the use of the heart lung bypass machine (cardiopulmonary bypass machine) during your operation. 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; however, this may take place the day before surgery or 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*, recently found to be associated with your planned surgery. Although the overall infection risk remains unchanged, all hospitals have been informed by Public Health England (PHE) of this infection risk associated with all heart and/or lung surgery that requires the use of a heart lung bypass machine.

Further information

1. 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, which were kept in the operating theatre.
2. At University Hospital Coventry and Warwickshire, we have now removed the heater-cooler units to outside the operating theatre to



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minimise (and potentially eliminate) the risk.

3. Tests on some heater-cooler units in Europe, United States and the UK have revealed growth of *Mycobacterium chimaera* (which is a type of bacteria that is common in the environment but does not frequently cause human infections), with the potential for growth of other organisms. There have been reports of this particular organism causing serious, potentially life threatening, infections in a very small number of patients having operations on their heart valves, in some cases several years after the operation.
4. From NHS data since 2007, it has been estimated that in patients undergoing cardiopulmonary bypass for heart valve repair/replacement, or repairs of the aorta, the risk of developing an infection with *Mycobacterium chimaera* is approximately 1 in 5,000. 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.
5. 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.
6. There is no evidence that extra antibiotics during surgery, in most cases, will give any further protection to this organism. Your surgical team will discuss with you whether additional antibiotics would be required in your particular 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.

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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

Document History

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