

Infection risks associated with heater cooler units used in open-heart surgery

NHS England have sent us this update on the issue of the very, very low risk of heart infections in children and young adults who have recently had open heart surgery.

Every patient, or their family, will be receiving a personal letter of explanation from their local hospital team in the next month and a copy of that letter and advice will be going to all GP's. Although we understand that patients and their families will be worried about this information there is no reason to race off to see the GP or call the hospital team unless you can see any of the symptoms listed below, and even if you do see them they are most likely to be due to a cold or other infection. If you do seek medical support take a copy of this information with you so that the medical team understand your concerns.

NHS England Information

If you or your child have had heart valve replacement or repair surgery, or a heart or lung transplant since January 2013 it is important that you are aware of a potential, but very low infection risk from a rare bacteria called *Mycobacterium chimaera*. If you are about to have one of these procedures you may also find this information useful.

The risks of infection from this bacteria are very low and much lower than the risks involved in not having appropriate treatment.

What is the infection risk?

Public Health England (PHE), the Medicines and Healthcare Regulatory Authority (MHRA) and NHS England have carried out an investigation suggesting that a device used to heat and cool the blood during some types of heart surgery has been linked to a rare bacterial infection caused by *Mycobacterium chimaera*. This device is essential for carrying out surgery and we are now working on reducing the risk. This is an issue that has affected this type of machine across the world.

The risk from this infection is very low – only about one person in every 5,000 people who have open heart surgery will develop it. For patients who do become infected, this infection can be slow to develop and difficult to diagnose. It is possible to develop symptoms several years after surgery.

What are the symptoms of infection?

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 by your GP or other health care professional as a possibility that needs to be excluded.

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.

Please note this infection cannot be spread person-to-person and remember that there are other causes for these symptoms so there is no need to be alarmed or to seek emergency treatment.

What to do if you do not have symptoms

If you are well and have no symptoms, you do not need to do anything immediately. Be aware of the symptoms, particularly because the infection can take up to five years after surgery to appear. GPs are being contacted and asked to make a note on the records of people who have had heart valve replacement or repair surgery since January 2013. When you next visit your GP, you can ask your GP to check that the information has been added to your patient record.

What to do if you feel unwell

If you feel unwell and have one or more of the symptoms listed above, please make an appointment with your GP for review. Your GP may refer you for assessment and a blood test. If you are diagnosed with the infection, treatments are available.

What is being done to reduce the risk of infection?

NHS England, Public Health England and the Medicine and Healthcare Products Regulatory Agency issued guidance to surgical centres in November 2015 after mycobacterium chimaera infection risk was identified. The guidance set out what hospitals needed to do to decontaminate heater cooler units to reduce the risk and also advised NHS surgical teams to inform patients having these specific types of heart surgery of the possible risk.

No cases of the infection have been identified in patients who had surgery since this guidance was published, although this is being monitored closely.

The guidance can be found at : <https://www.gov.uk/government/publications/infections-associated-with-heater-cooler-units-used-in-cardiopulmonary-bypass-and-ecmo>

The guidance is currently (January 2017) being revised and updated alongside additional guidance for GPs. The revised guidance will ask hospitals who provide heart surgery to identify all patients who have had a heart valve operation since January 2013 and cross check this information with GPs. Identified patients will then be contacted via a letter from their hospital to make them aware of the potential, but very low, infection risk.