



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Cardiac Surgery

Information for Patients on Mycobacterial Infections



As a patient, it is important that you are fully informed about your cardiac surgery.

This leaflet gives you information on mycobacterial infections so that you know what they are, how they might affect you and things to be aware of when you go home.

What is open heart surgery ?

Open heart surgery is any type of surgery where the chest is opened and surgery is performed on the muscles, valves, or arteries of the heart. There are other forms of treatments for cardiac problems (e.g. a stent) but these do not involve open heart surgery.

The most common type of open heart surgery is coronary artery bypass grafting (CABG) where a healthy artery or vein is grafted (attached) to a blocked coronary (heart) artery. Another form of open heart surgery is heart valve replacement to replace a defective or diseased heart valve.

What are Mycobacterial infections ?

Mycobacterium chimaera is one of a group of common slow-growing environmental organisms that sometimes cause respiratory infections or severe disease in people whose immune systems are in some way compromised. *Mycobacterium chimaera* is frequently found in many day to day places such as soil and water.

There is always the risk of complications after any surgery and infection is a small but potential risk after an open heart surgical procedure. In recent times *Mycobacterium chimaera* is one such infection that has been reported in patients who have had cardiac surgery. Internationally it has been noted that there may be a possible link between such infections and specific heater cooler devices used in regulating body temperature levels during cardiac operations.

The risk of being infected during an open heart surgery is deemed to be very low. Delaying surgery may pose a greater risk than the potential risk of acquiring an infection. However, patients need to be aware of the signs and symptoms of any potential infection, what to look out for and what they should do.

Patients whose immune systems are in some way compromised may have a slightly higher risk than other patients, but your doctor will discuss this with you as part of your preparation for surgery.

What is the risk of mycobacterium infection during my operation ?

The additional risk of being infected by a mycobacterial species during your operation is deemed to be very low. This is based upon information obtained from the UK on a large number of patients who have had previous cardiac surgery.

Normally for every 10,000 cases undergoing surgery to replace a heart valve, approximately 120 patients would be expected to develop a surgical site infection and 300-600 would have endocarditis* over a five year period. An additional one patient could be expected to develop an infection because of mycobacteria within this group.

* Endocarditis is a rare and potentially fatal infection of the inner lining of the heart (the endocardium). It's most commonly caused by bacteria entering the blood and travelling to the heart.

What are the symptoms that I should be aware of ?

After your cardiac surgery, your doctor will regularly check you for signs and symptoms of endocarditis. Your doctor will be aware that a mycobacterial infection may in rare cases be related and will provide treatment accordingly. You should contact your doctor should you have any signs or symptoms of endocarditis (see below).

The signs and symptoms of endocarditis are:

- Fever and chills
- A new or changed heart murmur
- Excessive fatigue
- Aching joints and muscles
- Profuse night sweats
- Shortness of breath
- Persistent cough
- Swelling in your feet, legs or abdomen
- Unexplained weight loss
- Blood in your urine
- Pain at top left of your tummy
- Red, tender spots under the skin of your fingers
- Tiny purple or red spots on the skin, whites of your eyes or inside your mouth

What treatment will I get ?

If your doctor thinks it is important to test you, a blood sample will be taken. This will help your doctor diagnose whether you have a mycobacterial infection. If you have, your doctor will refer you to an expert centre and a treatment plan will be agreed with you there. Typically this will involve taking antibiotics and further surgery may be required.

Any bacteria left untreated can become serious, so it is important that you contact your doctor promptly, if you have symptoms of endocarditis and that you follow the treatment prescribed by your doctor.

Your doctor will discuss this and a range of other issues with you to ensure you are fully informed. If you have further questions about a mycobacterial infection, you can ask your doctor at your appointment.

Further information

Further information on endocarditis is available on the HSE website at:

<http://www.hse.ie/eng/health/az/E/Endocarditis/Treating-endocarditis.html>

