

Risks associated with your anaesthetic

Section 6: Post-operative chest infection

After an anaesthetic and an operation there is a risk that you may develop a chest infection. This is called 'post-operative' because it happens after the operation. This article tells you about these infections, including information about what you can do to help prevent them.

Why or how do chest infections occur?

Anaesthesia and surgery interfere with the normal ways in which the lungs keep themselves clear of secretions and infection. Pain from the surgical wound (especially after chest or abdominal operations) can make breathing and coughing more difficult. This increases the risk of developing a chest infection.

How likely is it that I will get a post-operative chest infection?

In one survey, 1 in 5 patients who had abdominal surgery developed some degree of chest infection, although most of these were not severe.¹ Chest infections are less likely with most other types of surgery.

Who is most at risk?

How likely you are to develop a chest infection depends on:

- ▶ your state of health before the operation, in particular whether you have chest trouble already or are currently a smoker.²
- ▶ the type of operation you are having (chest and abdominal operations increase your risk of a chest infection)
- ▶ how long you spend lying in bed and unable to sit in a chair or walk about; this is why your nurses and physiotherapists will be encouraging you to get up
- ▶ how urgent your operation is – there is more time to get you into the best

possible condition if the operation is planned some time in advance

- ▶ the type of anaesthetic you are having
- ▶ your age – very young children and older people have a higher risk of chest infection but if in good health this increase is small.

What does it feel like if this happens to me?

If you are developing a chest infection you may feel feverish – hot and cold all over – and find breathing more difficult than usual. You are also likely to have a cough with green or yellow coloured phlegm. Depending on your surgical wound, coughing may be painful and not powerful enough to clear the phlegm properly.

Some people get a dry but persistent cough after an anaesthetic. This is common and does not mean you are getting a chest infection. It normally lasts only a day or two.

What treatment can be given?

Chest infections are usually treated with antibiotics. These may be given as tablets or a liquid to swallow but are often given intra-venously (an injection into a vein) if you are in hospital.

Physiotherapy is also an important part of treatment. There are different types of chest physiotherapy including deep breathing exercises and techniques to help you cough and breathe more comfortably, and to get rid of phlegm.

Oxygen may often need to be given.

- ▶ This is usually given through a light plastic facemask.
- ▶ Alternatively, small tubes can be placed just under the nose, which some people find more comfortable. This method cannot always be used – it depends on how much oxygen you need.
- ▶ Occasionally, the physiotherapist, nurse or doctor will ask you to use oxygen under pressure by breathing through a mouth piece (like a snorkel) or through a mask, which covers the mouth and/or nose. This helps to expand the lungs better.

You will also be encouraged to get out of bed as soon as it is safe for you to do so.

How quickly would I get better? Would there be any after effects?

Most people recover from the chest infection with the treatments described above within a few days. It may take a couple of months for your chest to feel back to normal again but most people have no long-term after effects.

Occasionally, the chest infection can become very serious and breathing is extremely difficult. This mostly happens if you:

- ▶ have had previous lung disease
- ▶ are a heavy smoker
- ▶ were already ill from other causes.

In this situation more direct ways of helping with breathing may be required.

Sometimes oxygen is given continuously under pressure through a tight fitting mask or hood. This is known as non-invasive ventilation. This treatment is usually given on a High Dependency or Intensive Care Unit.

Alternatively full ventilation (support of breathing) may be required. This is done on an Intensive Care Unit. A general anaesthetic is given and a breathing tube

is inserted into your trachea (windpipe). This tube is attached to a ventilator (breathing machine) which gives support as required with your breathing.

Where ventilation is required, the chest infection is usually very serious and, despite this treatment, some patients may die.

What precautions are used to prevent a chest infection?

Good pain relief after surgery is important to make sure you can breathe and cough easily. The anaesthetist may suggest using an epidural to give good pain relief following chest, abdominal and lower limb operations.³

You can find out more about this kind of pain relief from the leaflet 'Epidurals for pain relief after surgery' on the website www.youranaesthetic.info.

Getting your health, and particularly your chest, into the best possible condition beforehand will also help. When you are admitted to hospital the doctors may ask you to take extra medicines and have chest physiotherapy³ before your surgery.

Is there anything I can do to prevent this risk from happening?

These are some simple measures to help decrease your risk before you come into hospital.

- ▶ If you are a smoker, the most useful thing you can do to protect yourself is to stop smoking.⁴ You need to stop smoking at least six weeks before your operation to get the full benefit.
- ▶ If you have chest disease already, it would be wise to get your chest in the best possible condition before the operation. Your own doctor and chest specialist can help with this – extra medication may be necessary for a short period before surgery.

- ▶ If your chest is better during a particular time of year it may help to arrange your operation for that time. Again you and your doctors will need to work together to arrange this.
- ▶ Whatever your situation, you are more likely to avoid a chest infection and recover better from your operation if you are as fit as possible. Taking as much exercise as you are able to take in the months and weeks leading up to your operation will help.

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