Risks associated with your anaesthetic Section 6: Post-operative chest infection

A fter 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 does chest infection happen?

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 makes chest infection more likely.

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

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

Is there any kind of person for whom this risk is more or less likely?

How likely you are to get a chest infection² depends on:

- your state of health before the operation, in particular whether you have chest trouble already, or smoke
- the type of operation you are having (chest and abdominal operations are more likely to cause chest infection)
- how long you are likely to be 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 known about some time in advance

- the type of anaesthetic you are having
- your age very young children and older people are more likely to get a chest infection, but the risk is not much higher if you are old but still fairly healthy.

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 and may bring up green or yellow coloured phlegm. The coughing may be painful in itself and not powerful enough to clear the phlegm.

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.

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Oxygen will 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?

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 is very serious and breathing becomes extremely difficult. This mostly happens if you:

- have had previous lung disease
- are a heavy smoker
- were already ill from other causes, making you weak.

Sometimes it will be necessary to put a tube into the trachea (windpipe) and use a ventilator (breathing machine). You would be taken to the Intensive Care Unit (ICU) and given a general anaesthetic before this treatment starts. This is a lifethreatening situation and people may die from this kind of serious chest infection.

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 for chest, abdominal and lower limb operations.³

This is part of the anaesthetic during the operation but also provides pain relief afterwards. 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 physiotherapy.³

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

The things that you can do before you come into hospital are described here.

- 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 of stopping.
- 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 set this up.
- 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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