

Risks associated with your anaesthetic

Section 1: Feeling sick

You and your doctor have agreed that you need an operation. You may be worried about feeling sick or vomiting afterwards and want more information on the subject to help you prepare for your surgery.

This leaflet will explain the causes of sickness following anaesthesia and surgery, what can be done to prevent it occurring, and treatments available if it does happen to you.

Some words explained

Nausea. This is an unpleasant sensation, usually in the stomach, also described as 'feeling queasy' or 'feeling sick'. It is often felt with the urge to vomit.

Vomiting. This means being sick. It is the act of forcefully emptying the stomach, or 'throwing up'.

PONV. These letters are used to mean post-operative nausea and vomiting. 'Post-operative' means that it happens after the operation.

Anti-emetic drugs. These are medicines that help to prevent or treat nausea and vomiting.

General anaesthesia. This is a state of controlled unconsciousness during which you feel nothing and may be described as 'anaesthetised'.

Regional anaesthesia. This involves an injection of local anaesthetic which makes part of your body numb. You stay conscious, but free from pain.

You can find out more about general and regional anaesthesia in the booklet 'Anaesthesia Explained', which is on the Royal College of Anaesthetists website (www.rcoa.ac.uk).

Will I feel sick after my operation?

Not everyone feels sick after an operation or anaesthetic, although it is a very common problem. About one third of people (1 in 3) will experience a feeling of sickness after having an operation.

There are several factors that we know affect how likely you are to feel sick.¹ These are explained here.

Why do some people feel sick after operations?

A number of different reasons contribute to sickness after an operation.

The operation you are having

Some operations cause more sickness than others, for example:

- ▶ operations on the abdomen or genital area
- ▶ ear, nose or throat operations (e.g. removal of tonsils)
- ▶ surgery to correct a squint of the eye
- ▶ very long operations.²

Your anaesthetist will be able to tell you if your operation is likely to cause post-operative nausea and vomiting.

Drugs that are used

Some drugs are known to cause sickness:

- ▶ anaesthetic drugs, including anaesthetic gases

- ▶ pain relief drugs (especially the morphine-like pain relieving medicines, including codeine).^{1,2}

Who you are

Some people are more likely to suffer from post-operative sickness:

- ▶ children
- ▶ women
- ▶ non-smokers
- ▶ those who suffer from 'travel sickness'
- ▶ anyone who has suffered from post-operative sickness before.^{1,2}

Other reasons

- ▶ Being without food or drink before and after the operation.
- ▶ Being very anxious about what is happening to you. You can tell your anaesthetist that you are feeling anxious. He/she will talk to you about your worries and you can ask for a medicine to help with this.
- ▶ Travelling shortly after receiving an anaesthetic. If you are going home the same day, you find like some people that you feel sick or vomit during the journey. You are more sensitive to travel sickness during this time.

I felt sick after my last operation. Will I feel sick after this operation?

Not necessarily.

- ▶ Your operation may be different and less likely to cause sickness.
- ▶ Your anaesthetic can be tailored to reduce the likelihood of a recurrence.
- ▶ You may now be less likely to suffer (for example, the possibility of experiencing sickness after surgery lessens as you grow older).²

But if you have had sickness after surgery previously, you are more likely to have it again than if you have had an anaesthetic previously without any sickness.

How long does the feeling of sickness last?

Usually the sensation of sickness is short-lived or stops following treatment.

Uncommonly, it can be prolonged and last for more than a day.

Can feeling sick after an operation harm me?

Feeling sick or vomiting after an operation is distressing and unpleasant. It can make the pain of your operation feel worse, particularly if you are retching or vomiting, and it can delay when you start eating and drinking after your operation. This may keep you in hospital longer.

Rarely, if vomiting is severe and lasts a long time, it can result in other more serious problems, such as damage to your operation site, tears to your gullet, or damage to your lungs.¹

Can anything be done to prevent me from feeling sick after my operation?

Yes, although the risk of sickness can never totally be removed. Your anaesthetist will assess your risk of experiencing sickness when they visit you before your operation.

There are various ways in which your anaesthetist can change your anaesthetic in order to reduce your chance of suffering sickness.

- ▶ You may be able to have your operation performed under a regional anaesthetic rather than general anaesthetic, as this is less likely to cause sickness.^{2,3}
- ▶ You may be given one or several 'anti-sickness' medicines, called anti-emetics, as part of your anaesthetic.
- ▶ Some anaesthetic drugs are less likely to cause sickness than others. Your

anaesthetist may decide that you are suitable to receive them.^{2,3}

- ▶ Acupuncture or acupressure can be used to prevent or treat sickness after surgery. Not all hospitals are able to provide this treatment.
- ▶ You may receive oxygen through a face mask, and intra-venous fluids via a cannula (fluid goes into a thin plastic tube placed in a vein – often called a ‘drip’). These treatments may be given for other reasons, but they have also been shown to help prevent sickness.^{2,3}

If you are worried about sickness, or have experienced it following a previous operation, it is important that you discuss this with your anaesthetist.

Is there any treatment available if I feel sick after my operation?

Yes. If you feel sick after your operation, the methods used to prevent you feeling sick can also be used to treat it. For example you could be given anti-emetic (anti-sickness) drugs, oxygen, and intra-venous fluids.^{2,3}

It is much easier to relieve the feeling of sickness if it is dealt with before it gets bad. So, you should ask for help as soon as you feel sick.

What drugs may I be given and do they have side effects?

Anti-emetic drugs can be given as a tablet or as an injection. Injections can be given intra-venously into your cannula or into your leg or buttock muscle. Intra-venous injections work more quickly and reliably and avoid the need for another needle.

The same drugs are used to prevent and treat sickness after surgery. There are several different types. A combination of anti-emetic drugs may be given, as this is more effective than one drug given on its own.^{3,4}

All medicines have some side effects, although with anti-emetics these are generally minor or rare, and temporary. The following are commonly used anti-emetic drugs.

- ▶ **Prochlorperazine** (Stemetil). May cause tremors or uncontrolled body movements, known as an extrapyramidal reaction (rare).
- ▶ **Cyclizine** (Valoid). May cause drowsiness and a dry mouth (common).
- ▶ **Ondansetron** (Zofran) or **granisetron** (Kytril) or **tropisetron** (Navoban). Can cause headaches (uncommon).
- ▶ **Dexamethasone**. Although a steroid drug, the single dose given to prevent nausea and vomiting does not seem to be associated with the side effects seen with long-term steroid use.

Can I do anything to avoid feeling sick?

Yes. After your surgery:

- ▶ avoid sitting up or getting out of bed too quickly
- ▶ avoid drinking and eating immediately after your operation. Start with small sips of water and slowly build up to bigger drinks and light meals. Your nurse will give you advice about this
- ▶ good pain relief is important. Although some pain relieving medicines can make you feel sick, severe pain will too. You should ask for help if you are not sure
- ▶ taking slow deep breaths can help to reduce any feeling of sickness.

Where can I get further information?

If you want to ask any further questions about the type of anaesthetic planned for your operation please contact your local hospital or clinic before you come into hospital.

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References

- 1 Apfel CC et al. IMPACT Investigators. A factorial trial of six interventions for the prevention of postoperative nausea and vomiting. *N Engl J Med* 2004;**350**:2441–2451.
- 2 Struthers RA, Sneyd R. Epidemiological aspects of post-operative nausea and vomiting and assessment of risk. In: Strunin L, Rowbotham DJ, Miles A (Eds). *The effective management of post-operative nausea and vomiting. Aesculapius Medical Press*, London 2003;29–45.
- 3 Harmer M. Pharmacological intervention in post-operative nausea and vomiting: scientific evidence and expert opinion for anti-emetic therapy for prophylaxis. In: Strunin L, Rowbotham DJ, Miles A (Eds). *The effective management of post-operative nausea and vomiting. Aesculapius Medical Press*, London 2003;53–70.
- 4 Gan TJ et al. Consensus guidelines for managing postoperative nausea and vomiting. *Anesth Analg* 2003;**97**:62–71.



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