

Risks associated with your anaesthetic

SECTION 1: FEELING SICK

This leaflet explains 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 felt in the stomach area, which can also be 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 in that part of your body.

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. Overall, about one third of people (1 in 3) will experience a feeling of sickness after

having an operation, but it depends on what operation you are having, what anaesthetic and other drugs you receive, and on who you are (see below).

Why do some people feel sick after operations?

There are a number of factors that we know affect how likely you are to feel sick after an operation.^{1,2}

The operation you are having

Some operations cause more sickness than others, for example:

- ▶ operations in the abdomen or genital area
- ▶ gynaecological procedures
- ▶ 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 including:

- ▶ anaesthetic drugs, including some 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.^{2,4,5}

Other reasons

- ▶ Being without food or drink before the operation contributes to feeling sick afterwards. It is essential to avoid eating for six hours and drinking water for two hours before a planned operation. The reason for this is that if there is any food or liquid in your stomach during your anaesthetic, it could come up into the back of your throat and then go into your lungs. This would cause choking or serious damage to your lungs. You should stop eating and drinking for the amount of time advised, but not for any longer.
- ▶ Being without food after the operation. This also contributes to feeling sick. The time to start eating and drinking again varies depending on your operation – some general guidance is given later in this article. Otherwise your nurses, surgeon and anaesthetist will advise you.
- ▶ Being very anxious about what is happening can make you more likely to feel sick. 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 you with this.²
- ▶ Travelling shortly after receiving a general anaesthetic. If you are going home the same day, you may find 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 lasts an hour or two, 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 vomiting or retching (trying to be sick, but nothing coming up). 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 oesophagus (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 may reduce the sickness that you feel.²⁻⁵
- ▶ You may be given one or several 'anti-sickness' medicines, called anti-emetics, as part of your anaesthetic.¹⁻⁵
- ▶ Some anaesthetic drugs are less likely to cause sickness than others. Your anaesthetist may decide that you are suitable to receive them.^{1,2,4,5}
- ▶ Acupuncture or acupressure can be used to prevent or treat sickness after surgery, but not all hospitals are able to provide this treatment.⁶
- ▶ You may receive intravenous fluids via a cannula (fluid goes into a thin plastic tube placed in a vein – often called a 'drip'). Fluid may be given for a variety of reasons, but studies have shown that in certain groups of patients, giving fluid can help to prevent sickness.

If you are worried about sickness, or have experienced it following a previous operation, it helps if your anaesthetist knows about it.

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 and intravenous fluids.³⁻⁵ Aromatherapy can also help: smelling rubbing alcohol (isopropyl alcohol) may help you feel better.⁷

It is much easier to relieve the feeling of sickness if it is dealt with before it gets too 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 intravenously into your cannula or into your leg or buttock muscle. Intravenous 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.³⁻⁵

All medicines have some side effects, although with anti-emetics these are generally minor and temporary, or rare. The following are commonly used anti-emetic drugs with their side effects. How likely you are to get the side effect is given in brackets.

- ▶ **Cyclizine** (Valoid) May cause drowsiness and a dry mouth (common).
- ▶ **Ondansetron** (Zofran) or **granisetron** (Kytril) 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.
- ▶ **Prochlorperazine** (Stemetil) or **Metoclopramide** (Maxolon) May cause tremors or uncontrolled body movements, known as an extrapyramidal reaction (rare).

- ▶ **Scopolamine** (Scopoderm) Can be given as a stick-on patch 5-6 hours before your operation, to give it time to work. It can cause blurred vision and a dry mouth (uncommon).

Can I do anything to avoid feeling sick?

Yes. After your surgery:

- ▶ avoid sitting up or getting out of bed too quickly
- ▶ avoid eating and drinking too soon after your operation, but do not delay too long. Once you are awake you should start drinking and eating within 10 to 20 minutes as this improves your recovery. Start with small sips of water and slowly build up to bigger drinks and light meals. However, if you have had a more complicated operation your surgeon may not allow drinking or eating at first. Your nurses 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. Most hospitals provide an assessment clinic prior to your admission, staffed by experienced surgical nurses and anaesthetists. This is a good moment to ask any questions that you have.

Author

Dr Ian Selby, FRCA
Consultant Anaesthetist
Royal Preston Hospital

Editor

Dr Tim Smith, MD FRCA
Consultant Anaesthetist
Alexandra Hospital, Redditch
Final FRCA examiner

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. Gan TJ. Risk factors for postoperative nausea and vomiting. *Anesth Analg* 2006;**102**:1884–1898.
3. Carlisle J et al. Drugs for preventing post-operative nausea and vomiting. *Cochrane Database Syst Rev* 2006;**3**:CD004125.
4. Gan TJ et al. Consensus guidelines for managing postoperative nausea and vomiting. *Anesth Analg* 2003;**97**:62–71.
5. Gan TJ et al. Society for Ambulatory Anesthesia guidelines for the management of postoperative nausea and vomiting. *Anesth Analg* 2007;**105**:1615–1628.
6. Apfel CC et al. Acustimulation of P6: an antiemetic alternative with no risk of drug-induced side-effects. *Br J Anaesth* 2009;**102**:585–586.
7. Hines et al. Aromatherapy for treatment of post-operative nausea and vomiting. *Cochrane Database Syst Rev* 2012;**4**:CD007598.



The Royal College of
Anaesthetists

The Royal College of Anaesthetists

Revised edition 2013

The material from this article may be copied for the purpose of producing information materials for patients. Please quote the RCoA as the source of the information. If you wish to use part of the article in another publication, suitable acknowledgement must be given and the RCoA logo must be removed. For more information or enquiries about the use of this leaflet please contact:

The Royal College of Anaesthetists

website: www.rcoa.ac.uk

email: comms@rcoa.ac.uk

This leaflet will be reviewed three years from the date of publication.