

Risks associated with your anaesthetic

Section 1: Feeling sick

Summary

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.

Feeling sick after surgery and anaesthesia is very common. There are several factors that increase the risk of this unpleasant complication, some of which can be modified. It is important to discuss with your anaesthetist if you have suffered postoperative sickness before. There are several drugs that can be offered which can prevent and treat this effectively.

Will I feel sick after my operation?

Not everyone feels sick after an operation or anaesthetic, although it is a very common problem. Overall, just under a sixth of people in a large UK study¹ (1 in 6) will have moderate sickness after having an operation, but it depends on what operation you are having, what anaesthetic and other drugs you receive as well as your gender, age and other contributing factors (see below).

Why do some people feel sick after operations?

There is a number of factors that we know affect how likely you are to feel sick after an operation.^{2,3}

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, eg removal of tonsils
- surgery to correct a squint of the eye
- very long operations³
- Your anaesthetist will be able to tell you if your operation is likely to cause postoperative nausea and vomiting.





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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).^{2,3}

Who you are and contributing factors

Some people are more likely to suffer from postoperative sickness:

- children
- women
- those who suffer from 'travel sickness'
- anyone who has suffered from postoperative sickness before.^{3,5,6}

Other reasons

You should stop eating and drinking for the amount of time advised to reduce the risk of stomach contents ending up in the windpipe and lungs. However, being without food or drink before the operation contributes to feeling sick afterwards. There is no need to fast longer than recommended.

Being without food after the operation 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 explain anything in more detail if needed. If severe you may sometimes be offered medicine to help you with this.³

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.



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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).³

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.²

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.^{3,4,5,6}
- You may be given one or more 'anti-sickness' medicines, called anti-emetics, as part of your anaesthetic.^{2,3,4,5,6}
- Some anaesthetic drugs are less likely to cause sickness than others. Your anaesthetist may decide that you are suitable to receive them.^{2,3,5,6}



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- There is some evidence that suggests that aromatherapy,⁷ acupuncture or acupressure can be used to prevent or treat sickness after surgery, but not all hospitals are able to provide this treatment.⁸ Acupuncture is not widely available. Acupressure can be tried more easily using pressure from your fingers or from a band placed on a particular point on your wrist.
- 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.^{4,5,6} Aromatherapy may also 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.^{4,5,6}

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 may cause drowsiness and a dry mouth (common).

Ondansetron or **granisetron** 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 or **Metoclopramide** may cause tremors or uncontrolled body movements, known as an extrapyramidal reaction (rare).

Scopolamine can be given as a stick-on patch five to six hours before your operation, to give it time to work. It can cause blurred vision and a dry mouth (uncommon).



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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 nurses and anaesthetists. This is a good moment to ask any questions that you have.

References

- 1 EMK Walker et al for the SNAP-1 investigators. Patient reported outcome of adult perioperative anaesthesia in the United Kingdom: a cross-sectional observational study for the SNAP-1 investigators. *Br J Anaesth* 2016;**117**(6):758–766.
- 2 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.
- 3 Gan TJ. Risk factors for postoperative nausea and vomiting. *Anesth Analg* 2006;**102**:1884–1898.
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- 5 Gan TJ et al. Consensus guidelines for managing postoperative nausea and vomiting. *Anesth Analg* 2003;**97**:62–71.
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- 7 Hines et al. Aromatherapy for treatment of postoperative nausea and vomiting. *Cochrane Database Syst Rev* 2012;4:CD007598.
- 8 Lee A, Chan SKC, Fan LTY. Stimulation of the wrist acupuncture point PC6 for preventing postoperative nausea and vomiting. Intervention Review. The Cochrane Library, November 2015 (bit.ly/2gyhZdJ).



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Further information

Anaesthetists are doctors with specialist training who:

- discuss the type or types of anaesthetic that are suitable for your operation. If there are choices available, your anaesthetist will help you choose what is best for you
- discuss the risks of anaesthesia with you
- agree a plan with you for your anaesthetic and pain control
- are responsible for giving your anaesthetic and for your wellbeing and safety throughout your surgery
- manage any blood transfusions you may need
- plan your care, if needed, in the intensive care unit
- make your experience as calm and pain free as possible.

Common terms

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 postoperative nausea and vomiting. ‘Postoperative’ 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 or maybe sedated, but free from pain in that part of your body.

You can find out more about general and regional anaesthesia in the patient information booklet *Anaesthesia explained*, which is available from the College website via:

rcoa.ac.uk/documents/anaesthesia-explained

Risks and probability

In modern anaesthesia, serious problems are uncommon. Risk cannot be removed completely, but modern drugs, equipment and training have made anaesthesia a much safer procedure in recent years.

The way you feel about a risk is very personal to you, and depends on your personality, your own experiences and often your family and cultural background. You may be a ‘risk taker’, a ‘risk avoider’, or somewhere in between. You may know someone who has had a risk happen to them, even though that is very unusual. Or you may have read in the newspapers about a risk and be especially worried about it.



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People vary in how they interpret words and numbers. This scale is provided to help.



Your anaesthetist will give you more information about any of the risks specific to you and the precautions taken to avoid them. There are some rare risks in anaesthesia that your anaesthetist may not normally discuss routinely unless they believe you are at higher risk. These have not been listed in this leaflet.

Author

Dr Ian Selby, Lancashire

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This leaflet has been reviewed by the RCoA Patient Information Group which consists of patient representatives and experts in different areas of anaesthesia.

Disclaimer

We try very hard to keep the information in this leaflet accurate and up-to-date, but we cannot guarantee this. We don't expect this general information to cover all the questions you might have or to deal with everything that might be important to you. You should discuss your choices and any worries you have with your medical team, using this leaflet as a guide. This leaflet on its own should not be treated as advice. It cannot be used for any commercial or business purpose.

For full details, please see our website: rcoa.ac.uk/patientinfo/resources#disclaimer



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Information for healthcare professionals on printing this leaflet

Please consider the visual impairments of patients when printing or photocopying this leaflet. Photocopies of photocopies are discouraged as these tend to be low quality prints and can be very difficult for patients to read. Please also make sure that you use the latest version of this leaflet, which is available on the RCoA website: rcoa.ac.uk/patientinfo/risk-leaflets

Tell us what you think

We welcome suggestions to improve this leaflet. Please complete this short survey at: surveymonkey.co.uk/r/testrisk. Or by scanning this QR code with your mobile:



If you have any general comments, please email them to: patientinformation@rcoa.ac.uk

Royal College of Anaesthetists

Churchill House, 35 Red Lion Square, London WC1R 4SG
020 7092 1500

rcoa.ac.uk



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