



Anaesthetics – risks and side effects

Waking up during a general anaesthetic (accidental awareness)

About this leaflet

This leaflet is about the risk of waking up during a general anaesthetic. This is known as 'accidental awareness'. It explains why it might happen and what can be done about it.

General anaesthetics are medicines that give a deep sleep-like state. They are essential for some operations and procedures. During a general anaesthetic you are unconscious and feel nothing.

You can read about different types of anaesthetics on the RCoA website:
rcoa.ac.uk/patientinfo/resources.

What is accidental awareness?

- When you have a general anaesthetic, you are unconscious. Accidental awareness happens when you become aware (conscious) for a short time during a general anaesthetic.
- People who become aware during an anaesthetic will remember parts of the operation.
- It is more likely to happen at the start or the end of the anaesthetic.
- Dreaming or remembering the recovery room is not accidental awareness.
- Accidental awareness is rare but can be very frightening.

How likely is it to happen?

Out of every 100,000 people

5 woke up for a short time during a general anaesthetic

99,995 did not

This risk is higher:

- if muscle relaxants are used during surgery
- if you are very ill or need emergency surgery
- during cesarean sections.

What does it feel like?

Of the 5 in every 100,000 people who became aware during the anaesthetic:

- 4 said that it lasted less than 5 minutes
- 3 said that it happened before the operation started or after it finished
- 2 said that they heard someone talking or felt a touch
- 2 had longer-term effects such as anxiety, disturbed sleep, flashbacks, nightmares, PTSD (post-traumatic stress disorder)
- 1 said that they felt some pain.

These numbers come from research studies. You can see where we got our numbers on our website: rcoa.ac.uk/patientinfo/risks/evidence.

What causes accidental awareness?

Accidental awareness happens when a patient is not receiving enough anaesthetic. Your anaesthetist aims to give you just enough general anaesthetic to keep you unconscious. This is because too much anaesthetic can lower your blood pressure and slow your breathing and heart rate. Some operations and medical conditions can make it harder for the anaesthetist to give just the right dose of anaesthetic.

Accidental awareness is more likely to happen if:

- **you give birth by caesarean section under general anaesthesia:**
 - your anaesthetist will give you as little anaesthetic as possible so that it does not affect your baby
 - this operation starts very soon after you are unconscious, which means that you are more likely to become aware at the very beginning of the operation
 - the risk of waking up increases to 143 in every 100,000 people during a caesarean section.
- **you need a muscle relaxant for your surgery:** about half of all operations with general anaesthetic use muscle relaxants to make surgery possible. They are often used during more complex operations, including those on the head and neck, heart, chest or abdomen. The risk of accidental awareness increases to 13 in every 100,000 people when muscle relaxants are used. Patients who have had muscle relaxants cannot move to indicate that they have become aware. Anaesthetists use special monitors to check the level of awareness in patients throughout the operation.
- **you are very ill and need emergency surgery:** you are more likely to have lower blood pressure. The anaesthetist's first priority is to keep you safe, which sometimes means using smaller doses of anaesthetics. They will try to give you just enough anaesthetic to keep you unconscious and still prevent complications, such as further lowering your blood pressure or breathing problems.

What can reduce the risk of it happening to me?

- Tell your anaesthetist how much alcohol you usually drink and about any medicines or recreational drugs that you take. Be truthful. You may need more anaesthetic than other patients. This information helps your anaesthetist know how much anaesthetic to use.
- Sometimes you can have a regional anaesthetic instead, which numbs only a part of your body. You are awake but pain free and you might be given sedation. Your anaesthetist will discuss with you if this is an option.

What if it happens to me?

If you think that you have become aware during the operation, do not hesitate to tell your anaesthetist, doctor or nursing team. They will take your concerns seriously.

Where can I go for help?

- If you can, tell your anaesthetist after your operation or ask to speak to a different anaesthetist at your hospital.
- If you are already at home, you can talk to your GP. Your GP can arrange a meeting with an anaesthetist at the hospital for you.
- You can contact the PALS (Patient Advice and Liaison Service) at your hospital. In Scotland you can use the Patient Advice and Support Service. Contact details of these services are usually on documents from the hospital or on the hospital website. These services may have different names in Wales and Northern Ireland.

What will the anaesthetist do to help?

- Your anaesthetist or a different anaesthetist will talk to you.
- They will ask you to describe what you remember.
- They will talk to you about your memories and try to work out what happened.
- They will explain why it might have happened.
- The anaesthetist might refer you to a mental health professional who is used to working with people who had accidental awareness.

Good to know

- Your anaesthetist continually monitors how unconscious you are during the operation. They use monitors to help them see if you are becoming aware. They can give you more or less anaesthetic if necessary. They stay with you all the time during your operation and during recovery, until you are fully awake.
- Becoming aware during an anaesthetic does not mean it will happen again if you need another anaesthetic in the future.

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This leaflet has been produced by Leila Finikarides for the RCoA, in collaboration with patients, anaesthetists and patient representatives of the RCoA.

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.

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 because 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.

Tell us what you think

We welcome suggestions to improve this leaflet. If you're a patient or carer, we'd love to hear from you. Please complete this short survey at: rcoa.ac.uk/patientinfo/accidental-awareness#tell-us or you can scan the QR code below with your mobile.

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

Your feedback helps us understand who is using our information, how useful it is and how our resources have helped you. Thank you.



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

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