Royal College of Anaesthetists

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Patient Information Forum

Sedation explained

This leaflet explains what sedation is, how it works and when you may need it. It also explains the benefits and risks of using sedation and what it might feel like.

Importantly, it tells you what you will need to plan for your care after sedation.

It has been written by patients, patients' representatives and anaesthetists, working together.

Sedation is when drugs are given to help you feel more relaxed during a procedure. The drugs (sedatives) are usually given into your vein (intravenous or IV), but can sometimes be given by mouth (oral) or through a face mask.

Sedationist is the name given to the healthcare professional who administers your sedation. In the operating theatre, that person is usually an anaesthetic doctor. In other places in the hospital or in clinics outside of the hospital, this may be a doctor or other trained healthcare professional.

There are three different levels of intravenous sedation. They are called 'minimal', 'moderate' (sometimes also called conscious sedation) and 'deep' sedation. However, the levels are not precise and depend on how sensitive a patient is to the medication used.

What are the differences between sedation and general anaesthesia?

The main differences between sedation and general anaesthesia are:

- your level of consciousness
- the need for equipment to help support your breathing
- possible side effects.

With minimal and moderate sedation, you feel comfortable, sleepy and relaxed. You may drift off to sleep at times, but will be easy to wake.

With general anaesthesia, you are completely unaware and unconscious during the procedure.

Deep sedation is between the two.

Sedation explained

Minimal sedation (anxiolysis)	Moderate sedation (conscious sedation)	Deep sedation
You will have a **small amount** of a sedative drug	You will have **a little more sedative**	You will have **a higher dose of one or more sedative drugs**
You will **feel relaxed** and **less worried** by what is happening around you	You will feel **very relaxed** and **sleepy**	You **will sleep** during most of your treatment
You will **be awake** and **able to talk** normally	You will **be sleepy** but **can talk normally** and follow simple instructions if asked	You **will sleep** and be **unlikely to talk** during most of your treatment
You are **likely to remember** having your treatment, but not all the detail	You **may remember** some parts of your treatment	You are **unlikely to remember** much of your treatment – the level of sedation will be adjusted as needed
Minimal sedation should **not affect your breathing**	Moderate sedation should **not affect your breathing**	Your **breathing may slow down**. Your sedationist will monitor and help if needed. In the UK, deep sedation must be administered by staff who have the level of training and skill of an anaesthetic doctor.

What is oral sedation?

Taking a sedative tablet (eg diazepam) can sometimes be useful to relax you if you are very anxious before a general anaesthetic, but it is usually not enough on its own to relax you during a procedure. It takes a while to work, and the dose will vary between people.

You should **not** ask your GP to prescribe oral sedatives for you to take before you come into hospital, unless you have agreement from the team who will be looking after you, otherwise it may not be possible for your treatment to proceed.

It is important that you can think clearly when you meet with your doctor to discuss the benefits and risk of harm of your operation and procedure. You will then need to sign a form to state that you agree to have the operation or procedure.

What is intravenous sedation?

Intravenous sedation is when a sedative to relax you is injected into your bloodstream using a small plastic tube (also called a cannula) usually placed in a vein in your arm or hand.

Sedationists are trained to give the right amount of sedative and manage any side effects. Your sedationist will stay with you during your treatment and monitor your breathing and oxygen levels.

What treatments can be carried out under intravenous sedation?

Many minor treatments and investigations can be undertaken with intravenous sedation, often together with a local anaesthetic. A few examples include:

- skin or breast biopsies
- minor repair to fractured bones
- minor surgery to the skin, hand or foot
- procedures to help diagnose problems with the stomach (endoscopy), the lung (bronchoscopy), the colon (colonoscopy), or the bladder (cystoscopy)
- removal of teeth or other dental treatment
- eye operations, such as cataract removal.
- cosmetic surgery

Certain more extensive treatments can also be carried out under sedation and local anaesthesia.

Sedation in dental surgeries and cosmetic clinics

Treatments under sedation are often performed in a hospital. However, sedation for dental treatment can also be provided in a dental surgery or a specialist dental clinic. Sedation for cosmetic surgery may be performed in a clinic. The standards for your safe care remain the same. Your sedationist, dentist or cosmetic surgeon will discuss with you the types of sedation suitable – there are different types of sedation available for dental treatment for adults and children. They should explain what will happen during your treatment and any risks. It is important that you follow carefully any advice and instructions that they give you.

What are the benefits if sedation is an option for your treatment?

- Sedation works quickly and the dose can be adjusted so you get just the right amount.
- It allows you to be relaxed during your treatment. You may not remember much about your treatment afterwards.
- For some procedures, it is possible to give sedation instead of a general anaesthetic, which may be helpful for patients with some medical problems.
- It usually has fewer side effects than a general anaesthetic.
- Recovery is quicker than after a general anaesthetic, so you can usually go home within an hour or two of your treatment if you feel well.

What are the alternatives to sedation?

- **A general anaesthetic:** you will be fully unconscious throughout and will have no memory of the procedure.
- **Local anaesthetic without any sedation:** you will be fully awake during your treatment, but will be comfortable. A screen can be placed to stop you seeing the procedure.

Who decides whether I can have sedation?

You can discuss whether there is the option of sedation for your procedure with your doctor or nurse at the time of assessment. If it hasn't been offered, you can always ask to see if it is possible to have it.

If you are at higher risk from existing medical conditions, your doctors will discuss the options with you. You can then agree together the best option for you.

What can I do to prepare for a procedure with sedation?

- If you have people that you look after, for example children or older people, you will need to plan for someone else to look after them until the day after the procedure.
- A capable adult will need to take you home by car or taxi ideally – using public transport is not advised after sedation. As the effects of sedation can last up to 24 hours, they should stay overnight to look after you.
- Take all your medicines to hospital with you, including any inhalers and any over-the-counter medicines you take regularly.
- If you have an illness or a cold, or you are pregnant, please contact your hospital or clinic, as it may not be safe to have sedation. Your treatment may have to be rearranged.

- Let your doctor know on the day of the procedure if you are breastfeeding.
- Remove all makeup – including nail varnish and jewellery – before coming to hospital or clinic. You may wear a wedding ring.
- Bring some loose clothing, such as a dressing gown or a fleece, to keep you comfortable and warm. Wear flat shoes that are easy to put on.

Can I eat and drink before my treatment?

The clinic or hospital will give you exact instructions, including when to stop eating and drinking.

For moderate and deep sedation, you should stop eating six hours before your treatment, but you may drink normal amounts of 'clear fluids' up to two hours before your treatment. Clear fluids include water, diluted juice (no bits) and black tea or coffee.

Try not to stop eating or drinking for any longer than this.

For minimal sedation, fasting is often not required, but it is important to check exact instructions with your hospital.

If you have diabetes, you should ask for specific instructions about when you should take your diabetic medication and stop eating food.

What will happen on the day of my treatment?

You will usually change into a gown. When you go to the procedure room, your sedationist will attach some monitoring equipment to you. The equipment used will usually include:

- a blood pressure cuff on your arm
- stickers on your upper chest to record your heart rhythm
- a clip on your finger to measure your oxygen levels
- a thin plastic tube that measures the amount of carbon dioxide that you breathe out. This is usually attached to an oxygen mask.

How is intravenous sedation given?

- The sedation is given through a drip (cannula) which is put into a vein in your arm or the back of your hand. More sedative can be given if you need it during the procedure. In deep sedation, you will usually have a drug given continuously into your vein.
- You will have extra oxygen to breathe from a plastic tube sitting just inside your nose, or through a face mask.

What does sedation feel like?

This will vary between people, depending on how much of the drug they are given. In deep sedation you will be asleep, but in mild and moderate sedation you usually feel pleasantly relaxed.

When we asked some patients what it felt like, some answers were:

'I felt very spaced out and dreamy.'

'I thought I had been awake during it all, but I must have drifted off at times as suddenly it was an hour later.'

'I felt really relaxed and happy.'

'It was weird – I felt very detached from what was happening around me.'

Going home after the procedure

- If you have light or moderate sedation, you can usually go home within an hour or two of your treatment.
- If you have deep sedation, your recovery will usually take two hours or longer. When you can go home may also depend on how long it will take you to recover from the procedure itself.

- As previously mentioned, a capable adult will need to take you home by car or taxi – ideally not public transport – and remain with you overnight. If you have not organised for someone to be with you after treatment, you may need to stay in hospital overnight, or your treatment may need to be postponed.
- Sedation may make you unsteady on your feet. Please be careful on stairs and have somebody with you if you feel unsteady.

- Your ability to make decisions and judgements may be affected for up to 24 hours after your treatment, so you should not make any important decisions during that time. You should avoid posting on social media/public forums too.
- You should not return to work, look after dependants, drive, cook or operate any machinery for 24 hours as it may take this length of time for the drugs to leave your body.
- You should not take any alcohol or sleeping tablets for 24 hours after the procedure.
- Your doctor will give written instructions about further treatment to follow at home.
- The hospital will give you a contact telephone number to call if you feel unwell at home.
- If after the procedure you are concerned, feel unwell, or cannot find the hospital contact number, you can call your GP, ring 111 or go to your local accident and emergency department with a capable adult if necessary.

Side effects, complications and risks

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

Sedationists take a lot of care to avoid all the risks outlined. They will be able to give you more information about any of these risks and what they do to avoid them.

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

You can also find out more information from the patient information pages on the College website: rcoa.ac.uk/patientinfo

Risks during your sedation

- Your breathing rate may become slow. This is particularly common in deep sedation, but is a risk whenever sedation is used. Your sedationist is skilled in monitoring you and can support your breathing if required.
- It is very common for your blood pressure to drop by a small amount, but your sedationist is trained in treating this too.
- It is very common to be left with a small bruise where your cannula was placed.
- Feeling sick or vomiting is uncommon.

- There is a rare risk of stomach contents going into your lungs. It is important to follow the instructions for eating and drinking to keep this risk very low.
- Any allergic reaction to the sedation drugs is very rare.

Risks after your sedation

- It is very common to feel drowsy and less steady on your feet. You may be at higher risk of falling, especially if you are elderly.
- It is common for sedation to affect your judgement and memory for up to 24 hours.

Questions you may like to ask about your sedation

1 Who will give my sedation?
2 What type of sedation is best for me and the procedure I am having?
3 Do I have any specific risks?
4 When should I stop eating and drinking before my procedure?
5 What time should I arrange to be collected?

Additional resources

- Caring for someone who has had a general anaesthetic or sedation (rcoa.ac.uk/patientinfo/sedation).
- Academy of Medical Royal Colleges. *Safe Sedation Practice for Healthcare Procedures: An update. AoMRC*, 2021 (https://bit.ly/3wEoHGy).
- Academy of Medical Royal Colleges. *Safe Sedation Practice for Healthcare Procedures: Standards and Guidance. AoMRC,* 2013 (http://bit.ly/301ndq8).
- Intercollegiate Advisory Committee for Sedation in Dentistry. *Standards for Conscious Sedation in the Provision of Dental Care. RCS*, 2020 (https://bit.ly/3vz0YWP).
- Leaflets about specific risks associated with having an anaesthetic or an anaesthetic procedure are also available via the College website: rcoa.ac.uk/patientinfo/risks/risk-leaflets

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 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/leaflets-video-resources

Tell us what you think

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

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

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