



ANESTHESIA & SEDATION

Sedation

Sedation is often administered intravenously (IV); however, it can also be administered orally or through a face mask.

What is intravenous sedation?

Intravenous sedation is administered when a sedative (sedation medication) is infused into your bloodstream (vein) via a drip (tube) in order to relax you.

This will be carried out by an anesthesiologist.

Anesthesiologists are trained to administer the appropriate dosage of sedatives and to manage any adverse effects. Your anesthesiologist will accompany you throughout the entirety of your procedure.

There are three distinct intravenous sedation levels. They are known as “**minimum**,” “**moderate**” (often sometimes known as “conscious sedation”), and “**deep**” sedation, respectively.

1. Minimal sedation

The anesthesiologist will administer a low dose of sedative. You will feel calmer and less anxious about what is occurring around you, but you will remain awake and be able to speak normally. You may certainly recall receiving treatment, but not every detail. Minimal sedation should not impair respiration.

2. Moderate sedation (conscious sedation)

The anesthesiologist will provide a bit more sedative(s) so that you will feel extremely comfortable and sleepy. Importantly, you will still be able to communicate with your anesthesiologist and follow simple directions. You may recall certain aspects of your treatment. Breathing should not be affected by moderate sedation.

3. Deep sedation

The anesthesiologist will administer a larger dose of one or more medicines to induce sleep throughout the majority of your treatment. Your doctor will not expect you to converse with him or her during treatment. Your anesthesiologist will monitor your breathing and assist you as needed. You may occasionally recall a portion of your treatment.

What is oral sedation?

Oral sedation is occasionally useful for calming extremely worried patients before a general anesthetic.

Please do not ask your primary care physician to prescribe oral sedatives for you to take prior to your hospital admission unless you have previously signed your consent form since it can affect your reasoning and decision-making.

It is essential that you are able to think clearly when you meet with your doctor to discuss risks and sign a consent form for a surgery or procedure.

What are the differences between sedation and general anesthesia?

The primary distinctions between sedation and general anesthesia are:

- Patient's state of consciousness; the need for respiratory support equipment.
- Possible potential side effects.
- With low and moderate sedation, you experience drowsiness, comfort, sleepiness, and relaxation, but stay awake throughout the treatment.
- During a procedure under general anesthesia, you are fully unresponsive and unconscious.



What treatments can be carried out under intravenous sedation?

Many minor treatments can be undertaken with intravenous sedation. 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.

Which procedures can be performed under intravenous sedation?

With intravenous sedation, several simple procedures can be performed. A few examples include:

- Skin or breast biopsies
- Minor bone fracture repair
- Minor surgery on the skin, hand, or foot



- Procedures to diagnose problems with the stomach (endoscopy), lung (bronchoscopy), colon (colonoscopy), or bladder (cystoscopy)
- Extraction of teeth or other dental treatment
- Eye procedures, such as cataract removal

What are the benefits of intravenous sedation?

- It is quick acting, and the dose can be adjusted so you get just the right amount.
- It allows you to be more relaxed during your treatment. It may also mean that you remember very little about your treatment afterwards.
- For some procedures, it avoids the need for a general anesthetic which may be unsuitable for patients with some medical problems.
- It usually has fewer side effects than a general anesthetic.
- Recovery is quicker than after a general anesthetic.



What are the risks of intravenous sedation?

- Your breathing rate may become slow. This is common in deep sedation, but is a risk whenever sedation is used. The anesthetist is skilled in monitoring you and can assist your breathing if required.
- It is common for your blood pressure to drop, but the anesthetist is trained in treating this too.
- Feeling sick or vomiting can happen but is uncommon.
- Any allergic reaction to the sedation drugs is very rare.
- You may have a small bruise where your cannula was placed or attempted.
- Afterwards you may feel less steady on your feet, and you may be at higher risk of falling, especially if you are elderly.
- Sedation can affect your judgement and memory for up to 24 hours.

What are the alternatives to sedation?

- **A general anesthetic:** you will be fully unconscious throughout and have no memory of the procedure.
- **Local anesthetic 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 the option of sedation with your doctor 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, and you can reach a decision together.

I'm having sedation, what should I do before I come to the hospital?

- If you have people that you look after, for example children or old people, you will need to plan for someone else to look after them until the next day.
- A capable adult will need to take you home by car or taxi – ideally not public transport. 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 you use.
- If you have an illness, a cold or you are pregnant, please contact your hospital as it may not be safe to have sedation. Your treatment may have to be re-arranged.
- Let your doctor know on the day of the procedure if you are breastfeeding.
- Remove all makeup – including nail varnish and jewelry – before coming to hospital. You may wear a wedding band.

Can I eat and drink before my treatment?

- The clinic will give you instructions on when to stop eating and drinking.
- You will usually be asked to stop eating six hours before your treatment, but you may drink clear fluids up to two hours before your treatment. Clear fluids you will be allowed to drink include water, black tea, or coffee (no milk or cream).
- If you have diabetes, you should ask for specific instructions about when you should take your medication and stop eating food.

What will happen before my treatment?

You will change into a gown. When you go to the procedure room/ operating theatre, your anesthetist will attach some monitoring equipment to you. The equipment used will depend upon what procedure and type of sedation you are having, but will usually include:

- A blood pressure cuff on your arm.
- Leads on your upper chest to record your heart rhythm.
- A clip on your finger to measure your oxygen levels.

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 can be given as you need it during the procedure. In deep sedation you will usually have a drug given continuously into your vein.
- You will usually have 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 light 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.'

When can I go home?

- If you have light or moderate sedation, you can usually go home within an hour of your treatment.
- If you have deep sedation, your recovery will likely take one to two hours. When you can go home may often depend on recovery from the procedure itself.

Are there any important instructions for afterwards?

- As previously stated, a capable adult will need to take you home by car or taxi – ideally not public transport – and remain with you overnight. If arrangements have not been made for someone to accompany you after treatment, you may not be able to go home after the procedure.
- Sedation may make you unsteady on your feet. Please be careful on stairs and have somebody with you if you feel unsteady.
- Your decision making may be affected for up to 24 hours after your treatment, so you should not make any important decisions during that time. Be careful if using social media.

- You should not return to work, look after dependants, drive, cook or operate any machinery for 24 hours. It can take 24 hours 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.

Questions you may like to ask your anesthetist

1. **Who will give my sedation?**
2. **Do you recommend sedation or a general anesthetic?**
3. **Do I have any special risks?**
4. **When should I stop eating and drinking before my sedation?**
5. **What time should I arrange to be collected?**

Side-effects, complications, and risks

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

Anesthetists take a lot of care to avoid all the risks outlined in this section. Your anesthetist will be able to give you more information about any of these risks and the precautions taken to avoid them.