

Patient information from the BMJ Group

Wisdom teeth, impacted

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Wisdom teeth, impacted

If your wisdom teeth are impacted, it means they haven't come through your gums properly. You may wonder whether you need to have these teeth taken out. But unless they are causing problems, you may be able to leave them in place.

We've brought together the best research about impacted wisdom teeth and weighed up the evidence about how to treat them. You can use our information to talk to your dentist and decide which treatment is best for you.

What are impacted wisdom teeth?

Your wisdom teeth are the last adult teeth to appear. There are four of them, right at the back of your mouth. But sometimes they don't come through the gums properly. This usually happens when there isn't enough space, or when the teeth are growing in the wrong direction. When this happens, they're called impacted wisdom teeth.

You may wonder if you need to have your impacted wisdom teeth taken out. But as long as these teeth are not giving you symptoms such as pain, or causing damage to other teeth, you probably do not need to have them removed. Having them taken out can be painful. And, like any surgery, the operation has risks.

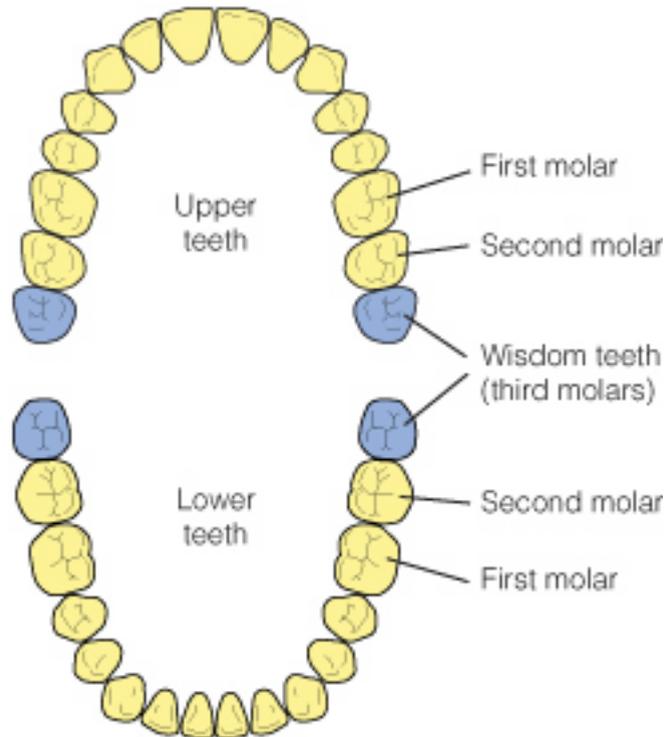
Key points for people with impacted wisdom teeth

- Wisdom teeth are normal adult teeth.
- Sometimes they don't come through the gums properly.
- When this happens, dentists describe them as **impacted**.
- Unless your wisdom teeth are causing you trouble, you probably do not need to have them taken out.
- But if they are causing pain, are damaging other teeth or your jawbone, or keep causing infections, you need to have them removed.

Wisdom teeth, impacted

Your wisdom teeth

The four wisdom teeth usually come through your gums when you are in your late teens or 20s. Sometimes they come through a lot later. They got their name because they come through later than your other teeth, when you're 'older and wiser'.



Wisdom teeth are the third set of molars to come through your gums.

- Wisdom teeth are the third set of molars.
- Molars are the big teeth towards the back of your mouth that you use for chewing food.
- You get your first set of molars at the age of 6 or 7 and the second set between 11 and 13. Before your late teens, you'll normally have two molars on both sides of your upper and lower jaw.
- Not everyone has wisdom teeth. In some people, they never appear.

When your wisdom teeth get impacted

Sometimes wisdom teeth don't come through the gums properly. This usually happens because there's not enough room for them or because they're pointing in the wrong direction. Your gums, jaw, and other teeth get in the way. In some people, all four wisdom teeth become impacted.

Wisdom teeth, impacted

- Wisdom teeth may be completely impacted (they are hidden below the gum). Or, they may be partially impacted (part of the tooth appears above the gum).^[1]
- Wisdom teeth are more likely to get impacted than other teeth because they emerge later than other teeth, when there is less room.

If you have small jaws, you have a higher chance of impacted wisdom teeth.

Problems caused by impacted wisdom teeth

Most people don't get any trouble from their impacted wisdom teeth.^[2] But some people do get problems. Impacted wisdom teeth that cause problems are usually in the lower jaw rather than the upper jaw.

Here are the most common problems:

Infection

The gum around an impacted wisdom tooth can become infected. This is the main problem caused by impacted wisdom teeth.^[1] One study found that 1 in 10 people with impacted wisdom teeth got an infection.^[1] You are more likely to get an infection if your wisdom teeth have partly appeared above the gum (they're partially impacted).

- You may have a flap of gum where the wisdom tooth has partly come through.
- Bits of food, **bacteria**, and saliva can collect under this flap. You may find it difficult to keep clean.
- This can cause an **infection**. You will get redness and pain.
- You may also get bad breath and swelling in your mouth. You may find it hard to open your mouth properly.
- The infection can spread to your cheek, neck, or jawbone.^[2]
- You may get an abscess. This is when infected pus collects in the gum.^[1] You may need to have this drained.
- If an infection is bad, you may need treatment with **antibiotics**.
- After it has cleared up, the infection may come back.

You don't necessarily need to have a wisdom tooth removed if it causes one infection. But you should have it removed if infections keep coming back.^[2]

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Decay

- It can be hard to keep your impacted wisdom teeth clean.
- This can lead to tooth decay and cavities (holes in the tooth).
- Your dentist may not be able to fill the cavity in a wisdom tooth, or you may keep getting cavities. Your dentist may recommend that you have the wisdom tooth removed.^[2]

Damage to other teeth

- Wisdom teeth may make it difficult for you to keep nearby teeth clean. You may then get tooth decay and cavities in these teeth, but this doesn't happen often.^[1]
- Wisdom teeth that are trying to come through can also push neighbouring teeth out of position. This can damage the roots of these teeth. But this is rare.^{[1] [3]}
- Finally, because they're hard to clean, wisdom teeth can cause gum disease that spreads to the teeth around them.

Cysts

- If your wisdom teeth are impacted, you may get a **cyst** (a sac filled with fluid) in your jaw. But this is rare.^[1]
- The cyst can damage your jawbone or nearby teeth.
- It is very rare, but cancer can develop from the cyst.^[1]

Teeth overcrowding

- Wisdom teeth may press on other teeth.
- Some dentists worry this could make your front teeth look crooked and change your 'bite'.
- However, researchers say that any crowding caused by wisdom teeth is not normally a problem.^[2] It shouldn't affect the appearance of your teeth or your bite.^{[1] [4]}

What are the symptoms of impacted wisdom teeth?

If your wisdom teeth haven't come through your gums properly, they are impacted. But this doesn't mean that they will bother you.

Wisdom teeth, impacted

You get symptoms if your impacted wisdom teeth cause problems such as an infection, a cavity or gum disease. If you do have one of these problems, you might have:

- Pain or tenderness in your gums or jawbone
- Bad breath
- Redness or swelling in your gums around the tooth that is impacted
- An unpleasant taste in your mouth when you bite near the area
- A headache or jaw ache.

More rarely you might have:

- Swollen glands in your neck
- Problems opening your mouth.

Sometimes you may have no symptoms, but could still have a problem with your wisdom teeth, such as:

- Decay that doesn't cause any pain
- Root resorption. This happens when your body attacks and destroys the root of your tooth.
- A cyst (a sac filled with fluid)
- A tumour.

As your wisdom teeth come through, your gums may feel sore or tender. This is temporary and should disappear once the tooth is in position. ^[5]

If your gums do get sore, some dentists recommend using a mouthwash. ^[5] You could also try painkillers such as ibuprofen or paracetamol. But see your dentist if the soreness doesn't go away. ^[5]

Wisdom teeth, impacted

How do dentists diagnose impacted wisdom teeth?



Your dentist may take an x-ray to see if your wisdom teeth are impacted.

Your dentist will normally be able to see if your wisdom teeth are impacted by examining your mouth. He or she will look at the places where your wisdom teeth are supposed to come through, and check whether:

- The area is swollen, or whether a tooth has partly come through your gum
- The tooth is pressing on the one next to it
- You have signs of infection, such as redness or swelling
- You have other problems, such as tooth decay and cavities.

Your dentist will probably take an **x-ray** of the area to get a better look.

If your teeth are impacted but not causing you problems, your dentist may want to keep an eye on them. He or she may take x-rays of the impacted teeth every time you come in for a check-up. It's important you visit your dentist for regular check-ups. ^[2]

How common are impacted wisdom teeth?

Impacted wisdom teeth are very common. Many people have at least one wisdom tooth that hasn't come through their gum properly.

In one European study, almost 3 out of 4 people in their 20s had an impacted wisdom tooth in their lower jaw. ^[6]

The removal of impacted wisdom teeth is one of the most common operations carried out in the UK. ^[1] ^[2] There are about 50,000 of these operations in England each year. ^[2]

What treatments work for impacted wisdom teeth?

Your wisdom teeth are the last adult teeth to appear in your mouth. But sometimes they don't come through the gum properly. This usually happens when there isn't enough space or when the teeth are growing in the wrong direction. When this happens, they're called impacted wisdom teeth.

Wisdom teeth, impacted

You may wonder if you need to have your impacted wisdom teeth taken out. In the UK, impacted wisdom teeth are sometimes removed even if they're not causing problems.^[2] But if these teeth aren't causing pain or damaging other teeth, you probably don't need to have them removed. Having them taken out can be painful. And, like any surgery, the operation has risks.

Key points about treating impacted wisdom teeth

- If your impacted wisdom teeth aren't causing problems you may not need to have them taken out.
- But if your impacted wisdom teeth are causing problems, such as infections or damage to other teeth, you may need to have them removed. For more information, see [When wisdom teeth need to be taken out](#) .
- Surgery on wisdom teeth almost always causes temporary problems such as pain and swelling. This may mean you have to take time off work or school.
- In a very few people, surgery causes permanent damage, such as numbness in the lower lip or tongue.
- You're less likely to have problems after surgery if you see a dentist or an oral surgeon with lots of experience in taking out wisdom teeth.
- You're more likely to get problems after surgery if you're older.

We've looked at the best research on surgery to remove impacted wisdom teeth that aren't causing problems. However, the research doesn't give a clear answer about whether removing these teeth helps prevent future problems. As a result, we've classified this treatment as needing further study.

For help in deciding which treatment is best for you, see [How to use research to support your treatment decisions](#).

Treatment Group 1

Treatments for impacted wisdom teeth that aren't causing problems

Treatments that need further study

- [Removing impacted wisdom teeth that aren't causing problems](#)

What will happen to me?

If your impacted wisdom teeth aren't causing problems, you probably don't need to have them taken out. But it's hard to say for certain what will happen in the future.

Wisdom teeth, impacted

If you keep your wisdom teeth

There's not enough good research to say for certain what will happen.

- You may never get any symptoms from them at all. Many impacted wisdom teeth never cause problems. ^[2]
- Your impacted wisdom teeth may eventually grow normally. ^[2]
- On the other hand, you may get a problem in the future, such as an infection, a cavity or gum disease. Sometimes impacted wisdom teeth can damage nearby teeth and bone. ^{[1] [3]}
- Some research looks at how likely it is you will get problems if your impacted wisdom teeth are not taken out. We found three studies that looked at what happened if impacted wisdom teeth that were not causing problems were left alone. The studies found that after about four to 12 years, between 3 in 10 and 6 in 10 people would need to have their impacted wisdom teeth taken out because they had developed problems such as an infection or gum disease. ^{[7] [8]}
- Some studies have shown that people who delay having their impacted wisdom teeth taken out may experience more difficulties after surgery, such as a mouth infection, than those who don't wait. They may also take longer to recover. However, the reasons for this are not clear. ^{[9] [10]}

If you have your wisdom teeth taken out

If you do have your wisdom teeth removed, it will take awhile to recover from the operation. Younger people tend to recover faster than older people.

- The operation can cause pain and swelling.
- This can mean you are off work or school for several days.
- There's a risk of more permanent problems, such as numbness in your lower lip or tongue.

To read more about the risks of surgery, see [Removing impacted wisdom teeth that aren't causing problems](#) .

Questions to ask your dentist

If you've been diagnosed with impacted wisdom teeth, you may want to ask your dentist some of these questions.

Wisdom teeth, impacted

Questions you might want to ask

- Are my wisdom teeth impacted? (Wisdom teeth are impacted if they haven't come through the gum properly.)
- Which ones are impacted?
- Are they causing any problems at the moment?
- Will they cause problems in the future?
- What, if any, treatments do you advise?

If your dentist advises you to have your impacted wisdom teeth removed

- Why do I need my wisdom teeth removed?
- Is it because they are causing problems now or because they might do so in the future?
- Do I need to have the operation soon?
- Who will do the operation? How much experience do they have?
- Where will the operation be done?
- Which impacted wisdom teeth need to come out?
- Will removing my wisdom teeth be a complicated operation?
- How long should my operation take?
- What type of **anaesthetic** do you think I will need?
- Could I have a sedative to make me calm for the operation?
- What are the risks of having my wisdom teeth taken out?
- What could go wrong?
- Is there any risk of permanent problems from having this operation?
- How long will it take for me to recover?
- How long will I be away from work/school?

Treatments:

Removing impacted wisdom teeth that aren't causing problems

In this section

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[How good is the research on removing impacted wisdom teeth that aren't causing problems?](#)

This information is for people who have impacted wisdom teeth that aren't causing problems. It tells you about having an operation to remove impacted wisdom teeth. It is based on the best and most up-to-date research.

Does it work?

If you have impacted wisdom teeth but they're not causing problems, you may not need to have them taken out. It's not clear whether having them taken out will prevent problems in future. We need more research to be sure.

What is it?

This is an operation in which a dentist or an **oral surgeon** takes out your impacted wisdom teeth. (Your wisdom teeth are impacted if they haven't come through your gums properly.)

Your dentist may be able to do this operation. It all depends on how easy or difficult each tooth is to remove. Upper wisdom teeth are often easier to take out than lower ones. If there is any chance of complications, you will probably be sent to an oral surgeon. This is someone who specialises in surgery on the mouth.

Before the operation

You'll need to have an anaesthetic, so you don't feel any pain. You can have either a **general anaesthetic**, which makes you sleep, or a **local anaesthetic**, which numbs the part of the mouth where you are having surgery. You can also have a **sedative**, which is a drug to make you feel relaxed.

A general anaesthetic will normally be given only in hospital. Most people have a local anaesthetic when they have impacted wisdom teeth taken out. The type of anaesthetic that's right for you depends on:

- How difficult the surgery is likely to be. A general anaesthetic might suit you if removing your teeth is going to take longer or be harder than normal
- How anxious you are. If you're very worried about the operation, you might prefer to be asleep or sedated

Wisdom teeth, impacted

- How healthy you are. Your dentist or surgeon will want to consider your medical history to see whether a general anaesthetic is more risky or safer for you.

For more information, see [Choosing the right anaesthetic](#).

During the operation

- Your dentist or oral surgeon will make a small cut into your gum to get to the impacted tooth underneath.
- Then, he or she will use special instruments to take out the tooth.
- Depending on the position of the tooth, the dentist or oral surgeon may need to cut the tooth into pieces to make it easier to take out.
- One of the main nerves in the mouth comes out near the wisdom teeth in the lower jaw. It's called the **lingual nerve**. So, if you're having the lower wisdom teeth taken out, there is a risk that this nerve could be damaged. Dentists and oral surgeons sometimes use a special instrument (called a lingual nerve retractor) to move this nerve out of the way. But studies have shown that moving the nerve can actually increase the risk of damage.^[14]
- Once the wisdom tooth is removed, the dentist or oral surgeon will stitch your gum back up.

There has been quite a lot of research into different surgical techniques for taking out wisdom teeth. But the results of the studies aren't clear. So we can't say what technique is likely to work best, or cause the least problems.^{[15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28]}

To read more about this operation, see Removing wisdom teeth in our section on operations and tests.

How can it help?

Some people have their impacted wisdom teeth taken out in the hope of avoiding problems in future. But you may never have problems. We don't know how likely it is that having these teeth taken out will prevent problems. The research isn't clear enough to say.

But if you are already having problems such as infections or damage to other teeth, you may need to have your impacted wisdom teeth taken out. See [When wisdom teeth need to be taken out](#) for more details.

Wisdom teeth, impacted

How does it work?

The theory is that if you have your impacted wisdom teeth taken out before they cause problems, you might avoid problems later, like crowding of your front teeth and damage to your other teeth. But the research so far isn't clear whether this is true or not.

Can it be harmful?

Yes. This operation can lead to complications.

- You'll almost certainly get some pain in your mouth and swelling in your cheeks after the operation. ^[29] ^[30]
- Some people get a bad, throbbing pain that starts after the operation. This is called a **dry socket**. ^[13] It probably happens because the blood clot over the healing gum breaks off. If this happens to you, call your dentist straight away so you can get treatment for the dry socket and the intense pain it can cause. To learn more, see [Dry sockets](#) .
- A nerve in your mouth may be damaged during the operation, giving you some numbness in your lower lip or tongue. This happens to between 1 and 8 people out of every 100. ^[31] The numbness is permanent for 1 in 100 people. ^[32]
- Another nerve in your mouth may also get damaged. This is called the lingual nerve and you need it to sense pain and temperature in your mouth.
- Moving the lingual nerve out of the way using a special instrument may actually increase the chances of temporary damage to this nerve. ^[33] This damage is permanent in up to 1 in 100 people. ^[34]
- Other complications include infection and bleeding. ^[35]

Some people have a higher chance of complications when they have their wisdom teeth removed. You may be more at risk of complications if:

- Your dentist is not very experienced at removing wisdom teeth ^[13] ^[36] ^[37]
- You're older. ^[38] ^[39]
- Your teeth are deeply embedded in your gums.

How good is the research on removing impacted wisdom teeth that aren't causing problems?

More research is needed on removing impacted wisdom teeth that aren't causing problems. The message from some studies is that this operation can do more harm than good. But these studies haven't found enough evidence to show whether or not having surgery can prevent problems in the future.

We found one summary of the research (called a **systematic review**) that looked at the results of two studies.^{[40] [41]} These studies were both **randomised controlled trials**. In both studies, removing wisdom teeth that weren't causing any problems didn't reduce problems later on.

We found three other large summaries of the research which recommended against removing impacted wisdom teeth that didn't cause problems, although the researchers said that the evidence wasn't very strong either way.^{[42] [43] [44]}

Another large study found no evidence to show whether or not surgery would be helpful.^[35]

However, we did find lots of evidence that removing wisdom teeth that are not causing problems can be harmful. Almost everyone who has the operation gets pain and swelling.^{[45] [46]} About 1 in 100 people are left with numbness in their lower lip or tongue.^[32]

There's some evidence from **observational studies** that you're more likely to get problems after surgery if:^{[13] [36] [37] [47] [38] [39]}

- Your dentist is not very experienced
- You're older
- Your teeth are deeply embedded in your gums.

Further informations:

When wisdom teeth need to be taken out

Wisdom teeth are impacted if they don't come through the gums properly. It's not always easy to tell whether impacted wisdom teeth need to be taken out.

But experts agree that an impacted wisdom tooth should be taken out if it's causing problems. The most common problems are:^[2]

- An infection around the tooth

Wisdom teeth, impacted

- Damage to a neighbouring tooth
- Decay (a cavity) in the tooth that the dentist cannot treat
- A cyst (a sac filled with fluid) in your jaw.

If you do need to have one or two of your wisdom teeth removed, it doesn't mean that you must have all of them taken out.

Your dentist may be able to do this operation. It all depends on how easy or difficult each tooth is to remove. Upper wisdom teeth are often easier to take out than lower ones. If there's any chance of complications, you'll probably be sent to an **oral surgeon**. This is someone who specialises in surgery on the mouth.

To read about what to expect if you have surgery, see [Removing impacted wisdom teeth that aren't causing problems](#).

Choosing the right anaesthetic

If you're planning to have your wisdom teeth taken out, you and your dentist or **oral surgeon** will need to decide what kind of anaesthetic to use.

A **local anaesthetic** is an injection that numbs the parts of your mouth where you're having the teeth removed. It's the same painkiller that you have for a filling.

A **general anaesthetic** makes you sleep. You may also have medicine to relax your muscles and make you forget anything that happened during the surgery. A general anaesthetic is usually given through a needle in the back of your hand or through a mask placed on your face.

A **sedative** is a drug that makes you feel relaxed and sleepy. You have it as well as a local anaesthetic. You'll still be awake, but you won't feel any pain. It's less risky than a general anaesthetic. The sedative is given through a needle in a vein in the back of your hand. Or you could take a sedative tablet to make you calmer during the operation.

Pros and cons

Local anaesthetic

- Local anaesthetic is usually safer than general anaesthetic.
- It is usually easier to recover from than general anaesthetic.
- It leaves you awake during surgery, which may be unpleasant.

Wisdom teeth, impacted

- If your dentist or oral surgeon thinks that the operation will be difficult, a general anaesthetic or a local anaesthetic plus a sedative may be better than a local anaesthetic alone.

General anaesthetic

- General anaesthetic may make things easier for you, as you'll be asleep for the operation.
- But with a general anaesthetic, there is a very small risk of serious complications. These include heart and breathing problems.
- You may be more likely to feel queasy or vomit than if you had a local anaesthetic. [\[11\]](#)
- There is also an extremely small risk of dying. About 1 in every 250,000 people who have general anaesthetic die. (To learn about risks and how they might affect your health decisions, see [What is a risk?](#))
- You'll need to be in hospital for this type of anaesthetic. You may also need to take more time off work or school. [\[12\]](#)

A sedative

- A sedative is safer than a general anaesthetic.
- If you feel anxious, having a sedative along with a local anaesthetic may be better than having a local anaesthetic alone.
- A sedative leaves you awake, but you'll be sleepy and relaxed. So the operation won't be as unpleasant as under a local anaesthetic alone.
- A sedative is usually easier to recover from than a general anaesthetic, but slower than a local anaesthetic alone.
- If your dentist or oral surgeon thinks that the operation will be difficult, a sedative may be better than local anaesthetic alone.

Most wisdom teeth are removed under local anaesthetic. You should talk to your dentist or oral surgeon about which type of anaesthetic is best for you.

Wisdom teeth, impacted

Dry sockets

A dry socket can happen after your wisdom teeth are taken out.

- If you get one, you'll have a throbbing pain in your jaw that moves towards your ear.
- It can happen about three days to five days after your operation.
- Dry sockets probably happen when the blood clot that has formed over your healing gum breaks apart and the area gets sore.
- It may be more likely to happen if you smoke, or if your dentist or surgeon is not experienced at taking out wisdom teeth. ^[13]
- A dry socket almost always heals normally. But it can be painful for several days. You'll probably need to take painkillers. You may also need antibiotics. And you usually need to see the dentist for further treatment.
- If your dentist or oral surgeon thinks you have a high risk of getting a dry socket, he or she may give you medicine during the operation to protect you.

Glossary:

bacteria

Bacteria are tiny organisms. There are lots of different types. Some are harmful and can cause disease. But some bacteria live in your body without causing any harm.

infection

You get an infection when bacteria, a fungus, or a virus get into a part of your body where it shouldn't be. For example, an infection in your nose and airways causes the common cold. An infection in your skin can cause rashes such as athlete's foot. The organisms that cause infections are so tiny that you can't see them without a microscope.

antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

X-ray

X-rays are pictures taken of the inside of your body. They are made by passing small amounts of radiation through your body and then onto film.

anaesthetic

An anaesthetic is a chemical that blocks the ability to feel sensations like pain or heat. A local anaesthetic blocks the feeling in a specific area of the body. For example, your dentist uses a local anaesthetic like lignocaine in your gums so that you don't feel the pain of having a cavity filled. A general anaesthetic makes you completely unconscious and is usually used only in a carefully controlled environment like an operating room.

oral surgeon

An oral surgeon is a professional who is trained in both dentistry and surgery. Oral surgeons do operations on people's mouth, face or jaw.

blood clot

A blood clot forms when the cells in blood clump together. Sometimes this happens to stop you from bleeding if you've had an injury. But it can also happen on the inside of your blood vessels, even when you haven't had an injury. A blood clot inside a blood vessel is called a thrombus.

general anaesthetic

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You may have a type of medicine called a general anaesthetic when you have surgery. It is given to make you unconscious so you don't feel pain when you have surgery.

local anaesthetic

A local anaesthetic is a painkiller that's used to numb one part of your body. You usually get local anaesthetics as injections.

sedation

A feeling of relaxation and calm, or the act of creating a feeling of calm by administering a drug.

systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

randomised controlled trials

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

observational studies

Observational studies examine how common a disease is or how risk factors affect the chance of getting a disease. There are three types of observational studies: cross-sectional studies, cohort studies and case-control studies.

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