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# Adenoidectomy

**An operation to remove the adenoids**

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This information is based on *Clinical Evidence*, the *British Medical Journal's* worldwide survey of the best, most up-to-date medical research, used by doctors everywhere.

You can find out more about your condition and your treatment choices at NHS Direct Online ([www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)).

This information tells you what to expect if your child has an operation to take out his or her adenoids. It explains how the operation is done, how it can help, what the risks are and what to expect afterwards.

The benefits and risks described here are based on research studies and may be different in your hospital. You may want to talk about this with the doctors and nurses treating your child.

## What is an adenoidectomy?

In an adenoidectomy, your child's adenoids are cut away from the back of their nose to help drain away fluid from inside their ears. It can be done on its own, but it is usually done at the same time as an operation to put tubes (grommets) in your child's ears, or if your child has their tonsils removed.



## Why does my child need an adenoidectomy?

**To help your child breathe more easily:** The adenoids are soft mounds of tissue at the back of the nose. They are part of the body's system for fighting infection. Children's adenoids can get infected and swell up, often after a cold. This can cause a blocked nose and your child may sound bunged up.

**To help reduce infections and make your child's hearing better:** Germs (bacteria and viruses) from infected adenoids can cause ear, nose and throat infections. If your child's adenoids become very large, they can block the openings to the tubes that run from each ear to the back of their nose.

These are called **eustachian tubes**. They drain away the fluid that's made in the middle part of their ears. Some children get sticky fluid in their middle ears (doctors call this **glue ear**). If children's eustachian tubes are blocked, this fluid builds up in their ears and stops them hearing properly.

Taking out your child's adenoids may help to unblock their eustachian tubes so that the trapped fluid can drain away through their nose and throat.

Not all children with glue ear or breathing problems have their adenoids removed. This is because glue ear can get better by itself and adenoids tend to shrink by the time children reach school age.

An adenoidectomy might be done (usually with grommets) if your child has:

- Had glue ear for at least three months
- Had ear infections several times, one infection after another
- Lost at least 20 decibels of hearing in both ears.<sup>1</sup> Decibels are a way of measuring how loud a sound is. If your child has a hearing loss of 30 decibels, normal conversation will sound as loud as a soft whisper.<sup>2</sup>

Taking out the adenoids is a bigger operation than just putting in grommets and is not recommended for children under 2 years old.<sup>3</sup>

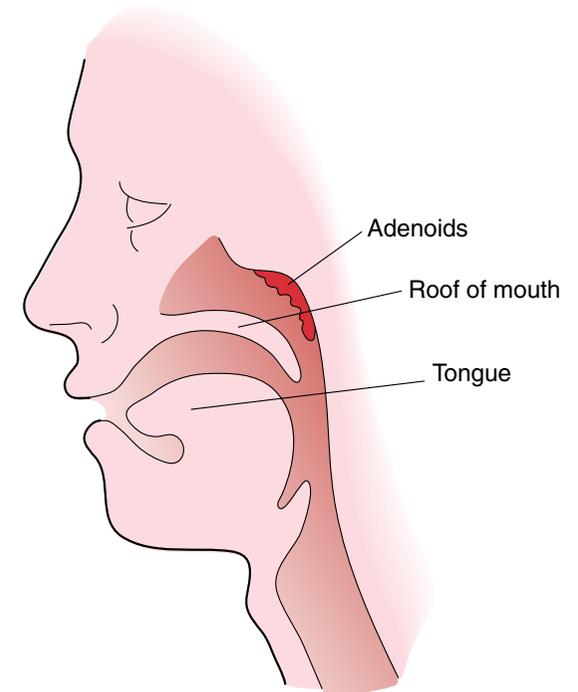
## What happens during an adenoidectomy?

The operation takes about half an hour and your child probably won't have to spend a night in hospital.

Your child will be given a **general anaesthetic** so he or she will be asleep during the operation.

To take out your child's adenoids, a support is put under their shoulders so that their head is tipped back a little.

A breathing tube is put into their mouth. Then, their mouth is held wide open using a surgical instrument so that the surgeon can reach your child's adenoids through their mouth.



The surgeon uses their finger to feel how large your child's adenoids are, then scrapes them out using a tool that's like a spoon with one sharp edge. It only takes a few minutes. The bleeding is then stopped by pressing a gauze pad against the back of your child's nose where their adenoids used to be. This takes about five minutes. Your child will not need any stitches.<sup>4 5</sup> Some surgeons use a heated device to burn away the adenoids, instead of cutting them out.

If your child is also having **grommets** put in their ears, a tiny cut (two or three millimetres long) is made in their eardrum, fluid is drained away and the grommet is put through the opening. Different types of grommets are used but most are plastic, a few millimetres long and shaped like a dumbbell.

In the past, surgeons removed children's tonsils at the same time as their adenoids. But there is no evidence that taking children's tonsils out helps glue ear. These days, children's tonsils are not usually taken out unless the tonsils keep getting infected, an infection lasts a very long time, the tonsils stop the child from swallowing easily or the child has breathing problems.<sup>2 3</sup>

## How can an adenoidectomy help my child?

How well taking out the adenoids works depends on your child's age. It also depends on how much their adenoids are causing a blockage. The operation seems to work better in children aged 5 years or older.<sup>6</sup> It's not easy to say how much your child will be helped by having his or her adenoids taken out.

- If your child has bouts of glue ear that come and go, just **taking out their adenoids (without putting in grommets)** is unlikely to prevent the glue ear coming back.<sup>7</sup>
- If your child has severe glue ear that has dragged on for months or years, then it may clear up faster after their adenoids are taken out, especially if your child is aged 5 years or older.<sup>6</sup>
- **Having their adenoids taken out** improves children's hearing by just less than 12 decibels, on average. This is about the same improvement they get from having grommets put in. This improvement is unlikely to make a difference to your child's daily life. But, the effect on hearing varies a lot from child to child.
- **Having grommets put in as well as taking out the adenoids** improves hearing slightly more than having either operation on its own. Having the adenoids removed improves hearing by an extra 1 or 2 decibels compared with just having grommets fitted.<sup>2</sup> It's unlikely that your child will notice this difference.
- Fitting grommets when your child has his or her adenoids removed may mean your child doesn't need a second operation to fit another set of grommets. This is because having both operations together may prevent your child's glue ear coming back.<sup>6</sup> But researchers aren't certain about this and say more studies are needed.<sup>2</sup>

## What are the risks of an adenoidectomy?

All operations have risks, and your surgeon should talk these through with you first.

Anaesthetics can have side effects. For example, your child may feel sick afterwards. It is also possible, but rare, to have an allergic reaction to the anaesthetic. If your child has any allergies you must tell your doctor. Your child's blood pressure, heartbeat, body temperature and breathing will be closely monitored.

### Problems that can happen straight away

**Bleeding:** There's a very small risk that the area where the adenoids used to be will bleed heavily (**haemorrhage**). Less than 1 in 100 children who have this operation will need emergency treatment for bleeding. It can happen soon after surgery, in the following 24 hours, or a few days afterwards. It has to be dealt with quickly so that the child does not lose too much blood, or breathe in blood.<sup>7</sup>

**Infection:** There is a slight chance of infection. Your child may feel hot or generally unwell, and his or her throat or nose may hurt. This can be treated with antibiotics.

**Damaged teeth:** Occasionally, the instrument that holds the child's mouth open during surgery can chip a tooth or knock out any loose ones.<sup>7</sup>

**Death:** All operations carry some risk of death. For taking out the adenoids alone, or with the tonsils, the risk is between 1 in 15,000 and 1 in 25,000.<sup>7</sup>

### Problems that can happen later

**Nasal speech:** Your child may sound like they are speaking through their nose. This is because the operation can leave a gap between the back of the roof of their mouth and their nose. The problem usually goes within a few days or weeks but, in rare cases, it can last several months. If this happens, your child may need speech therapy, or surgery to close the gap. The problem happens in less than 1 in 3,000 adenoid operations.<sup>8</sup>

### Rare problems

**Stiff neck:** Your child's neck may be stiff or seize up (spasm) after surgery because the adenoids are close to muscles in the back of their neck. This should get better in a few days. It's possible, but rare, to get a more serious and painful neck problem called **torticollis**. This is where someone's head turns one way by itself.

**Damaged eustachian tube:** Your child's eustachian tubes may be damaged during the operation.

Your child has a higher chance of problems if he or she has adenoid surgery and grommets together. That's because both operations have risks. Common side effects of an operation to put grommets in the ears are infection, discharge from the ears, changes to the eardrum, and poor healing of the cuts made for the grommets.

## Is having an adenoidectomy painful?

Your child will be unconscious during the operation and will not feel any pain. They may have a sore throat afterwards, especially when speaking and swallowing because the roof of their mouth might rub the raw area where the adenoids were.

Your child's jaw and the corners of their mouth might hurt because of the way it is held wide open during the operation.

Paracetamol can help with the soreness. If it doesn't help, it's important to tell the nurse because being in pain can slow your child's recovery. For example, your child may refuse to eat if it hurts when they do eat. Your child may need a higher dose or a different type of painkiller.

## What will happen if my child doesn't have an adenoidectomy?

Adenoids usually shrink after the age of 4 years old, and rarely cause problems in adulthood. If your child doesn't have the operation, the glue ear will often clear up by itself.<sup>9</sup> But it's hard to say how long this will take.<sup>10</sup> It might take several weeks or even months.<sup>11 12</sup>

- About 4 in 5 children aged 2 years old to 4 years old still have glue ear after a month<sup>9</sup> and over half still have glue ear after three months.<sup>12</sup> But it can take much longer for glue ear to clear up, especially for younger children. About 1 in 20 children aged 2 years to 4 years have glue ear for

one year or more.<sup>13</sup> And, some children get glue ear again and again.<sup>13</sup>

- Most children no longer have glue ear by the time they are 7 or 8 years old.<sup>14</sup> By this age, the tubes that drain fluid from the ears naturally (the eustachian tubes) are bigger.
- Glue ear can take longer to clear up by itself in children whose parents smoke.<sup>6</sup>
- If your child keeps getting glue ear or has it for a long time, it can affect their development in the short term. They may not hear their teacher and not do so well in class. But there is no evidence that children who don't have the operation will develop any differently from children who do have their adenoids taken out and grommets put in.
- When the glue ear clears up, your child's hearing should go back to normal.

## What other treatments are there?

Infected and swollen adenoids that cause glue ear can be treated with drugs. Glue ear problems can also be treated with grommets alone.

**Antibiotics:** These are sometimes given to children with glue ear. They can help some children recover faster. But antibiotics often cause side effects such as sickness and diarrhoea.<sup>11 15</sup> It can also be hard to get small children to take antibiotics.<sup>16</sup>

Doctors do not usually recommend antibiotics as a treatment for glue ear.

**Steroids:** These can reduce swelling. Children with glue ear may be prescribed a steroid spray for them to breathe in through their nose. Combining antibiotics with steroids may clear your child's fluid better than antibiotics on their own.<sup>17</sup> But there isn't enough evidence to recommend this treatment.<sup>18</sup> The steroids only work in children's noses and don't affect any other part of their bodies.

The steroids used to treat glue ear are called **corticosteroids**. They are not like the steroids used by bodybuilders. Corticosteroids are similar to the steroids your body makes naturally.

## What can my child expect after an adenoidectomy?

Your child may be sleepy after the operation because of the anaesthetic. They will be carefully monitored for a few hours and encouraged to eat and drink.

It will probably take a week or two for your child to recover fully and they should take it easy. It's best to keep your child off school and away from crowded places for a week so they don't pick up infections.

It's important for your child to drink lots of fluid and to eat normally. Don't worry if your child starts sniffing or sneezing; it won't cause any damage or make bleeding start again.

Your child might be sick when you get home. This is normal as blood from the surgery may have gone down into their tummy. But if there is red, black or brown in the vomit more than once then contact a doctor as your child's throat may be bleeding.

Your child may have a blocked nose and a sore throat for a few days. Paracetamol should help.

Some children say it hurts to open their mouth to clean their teeth at first, but you should encourage your child to brush as usual because this will help keep their mouth free of infection and help the adenoid area heal more quickly.



Try to keep your child away from cigarette smoke. This could make them feel worse after the operation and it may make the glue ear come back.<sup>19</sup>

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