

# GROMMETS

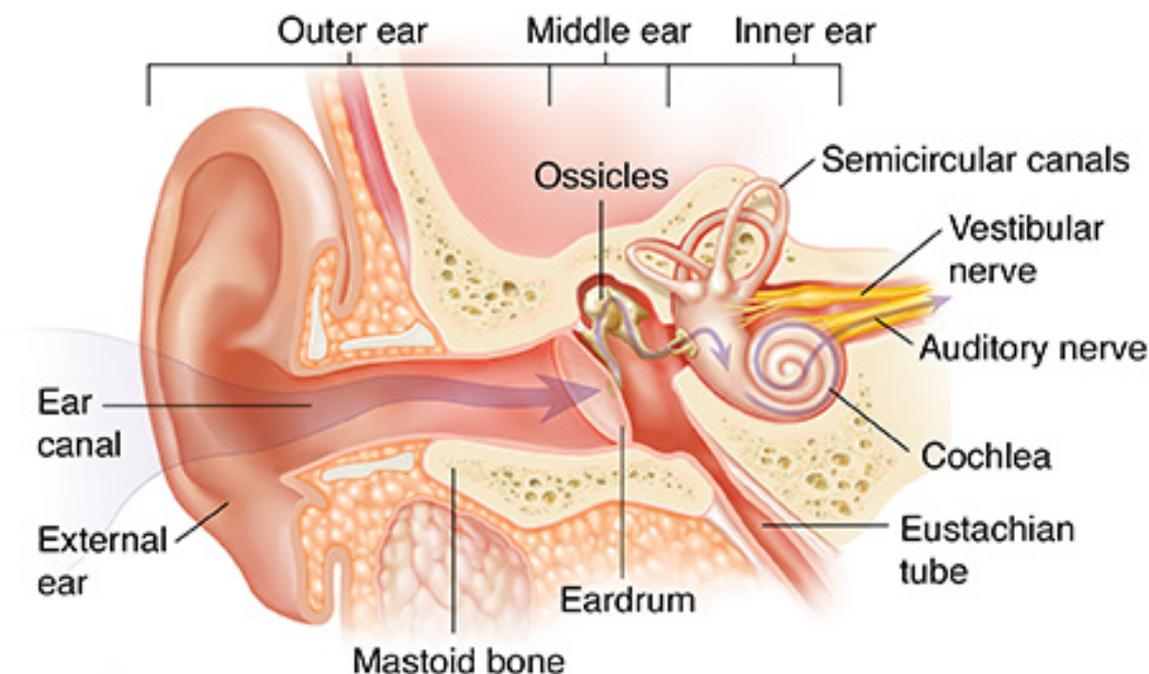
## INFORMATION FOR PARENTS AND PATIENTS

**IT IS VERY IMPORTANT YOU READ THIS INFORMATION AND ASK ANY QUESTIONS PRIOR TO GIVING CONSENT FOR GROMMETS**

### AN ELECTIVE OPERATION

Approximately 30,000 grommet operations are carried out in the UK annually. This may be carried out as a single procedure or together with adenoidectomy (and sometimes, tonsillectomy). (See adenoid and tonsillectomy information leaflets).

Grommet insertion is an “elective” operation, meaning the patient, parent or legal guardian decide if they wish to have the operation based on discussion and explanation of the benefits and risks with their surgeon.



© Krames Staywell

**The basic anatomy of the ear. Mucus fluid (glue ear) builds up in the middle ear where the three little bones (ossicles) sit.**

### WHY INSERT GROMMETS?

Grommets are tiny plastic (Teflon) tubes with a hole in the middle to help allow more air into the ear, helping reduce inflammation in the ear and keeping the ear pressure normal. This helps to improve the hearing.

The usual reasons for inserting grommets in children's ears are for hearing loss caused by a build-up of mucus in the middle ear (the cavity deep to the ear drum). This is also called "glue ear or serous otitis media with effusion.

Grommet insertion may be recommended for very frequent and recurrent ear infections, particularly when infections cause perforation of the eardrum with discharge of infected fluid from the ears.

Less commonly, for pressure change in the ear causing persistent or recurrent pain, a grommet might be inserted to relieve this.

### **WHAT IS "GLUE EAR"?**

Glue ear (serous otitis media, otitis media with effusion) is a build-up of mucus in the middle ear. It is common, affecting about 80 in every 100 children of pre-school and school age. Glue ear causes difficulties with hearing, speech and language development and social behaviour with other children, teachers, carers and parents.

The condition is more common in boys than girls and can run in families. Persistent glue ear that does not settle is more common in the autumn and winter months.

For many children, glue ear follows a head cold or respiratory infection and will resolve without treatment over a period of a few months.

Glue ear seems to be partly caused by infections (typically, coughs and colds), leading to inflammation of the tube leading from the back of the nose to the ear (the Eustachian tube). The inflammation also affects the adenoid in the back of the nose; this inflammation leads to an over-production of mucus in the ear, which prevents the little bones (ossicles) vibrating normally when sound waves reach the ear drum.

The tendency for glue ear to run in families is due to an inherited variation in the way oxygen is handled in the ear; if this is less efficient, the glue ear is likely not to clear for longer.

When the glue ear does not resolve and there are concerns about hearing, speech and language development and social behaviour, treatment of the glue ear is recommended.

If symptoms are mild, it might be reasonable to wait for a period of time to see if the "glue ear" clears over a period of time, during which the hearing can regularly be checked.

### **GLUE EAR IN ADULTS**

Glue ear is less common in adults. It can follow a respiratory tract infection, sinusitis, a cold in combination with nasal allergy, flying with a cold. Rarely, a structural blockage or swelling in the back of the nose, interfering with normal Eustachian tube function, causes "glue ear" in adults.

In adults, examination of the back of the nose at the time of grommet surgery might be advised; if there is abnormal tissue on the back of the nose, a biopsy (specimen) will be taken under general anaesthetic at the time the grommets are inserted. The risks from such a biopsy are similar to adenoidectomy. (See adenoidectomy information leaflet).

## TREATMENTS AVAILABLE FOR GLUE EAR

For many children, the glue ear will resolve over a period of months; after the diagnosis, with a hearing test, a further hearing test three months later might be recommended, as for some children their glue ear will settle over this period and their hearing return to normal.

Medical treatments, including decongestants, antibiotics, cranial osteopathy and dietary change have not been shown to be effective managing glue ear.

Treating nasal allergy may help to clear glue ear in affected children.

Using a medical nasal balloon to push air through the nose, up the Eustachian tube into the ear can help to improve glue ear in older children. The balloon device (Otovent) is available from GPs on an NHS prescription.

## BEFORE THE GROMMET OPERATION

Having a general anaesthetic with a head cold carries an increased risk of post-operative chest infection. If this is the case, and for your safety, your operation might be postponed until you are free from infection.

Older girls, (12 years and above), will be asked to confirm they are not pregnant, and may need a pregnancy urine test before surgery to confirm they are not pregnant. If pregnancy is confirmed, the operation will have to be cancelled.

Please **do not** come for your operation if you or anyone in your household has had diarrhoea or vomiting in the preceding 48 hours.

***Prior to surgery, you (or parent/legal guardian) will be asked to sign a consent form for yourself, or on behalf of your child, confirming you wish to have the grommet operation, and have fully understood the benefits and risks of the operation, including the information in this leaflet.***

## THE GROMMET OPERATION

You will see your anaesthetist before your (or your child's) operation and they will be able to answer specific questions about your general anaesthetic, including the use of painkillers by suppository (in the back passage of the bottom), once you are asleep with the anaesthetic.

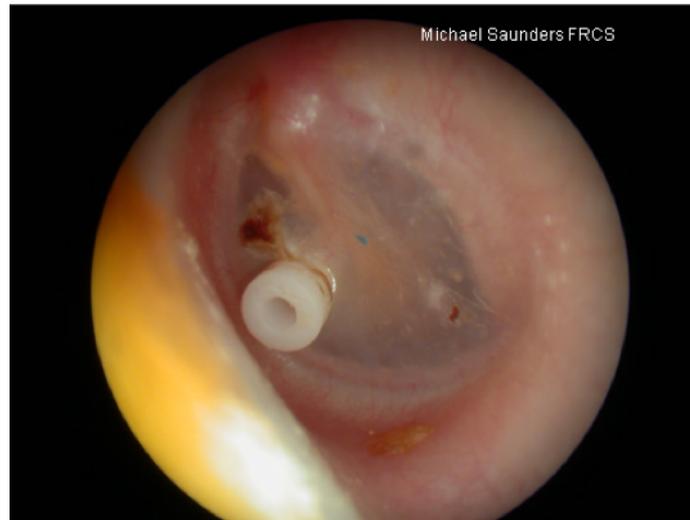
The operation is carried out under a general anaesthetic, with the patient fully unconscious. Once off to sleep, by breathing a gas and/or having an injection, the anaesthetist will place a breathing tube through the mouth and give more anaesthetic vapour with oxygen through the tube to keep the patient asleep.

Parents are encouraged to come to the anaesthetic room until their child is asleep, but if they do not wish to do this, a member of the ward team will accompany your child.

The anaesthetist also gives the patient painkillers and anti-sickness medicines to the patient while they are asleep.

The grommet operation is performed with a microscope looking down the ear canal; there are no cuts on the outside of the ears or face; the operation usually takes about 20 minutes.

I usually carry out the operation in the morning, and the patient would go home, if well, about 2 hours after the operation.



**A grommet in the left ear drum. (Photograph courtesy of Mr M Saunders FRCS)**

## **POST-OPERATIVE CARE**

Your throat might be a little sore from the anaesthetic breathing tube. Earache is uncommon after grommet surgery.

It is common to have a little discharge from the ear, sometimes pink and bloodstained, for a few days after the operation. You will be provided with antibiotic ear drops to take home to reduce the risk of infection while the grommets are settling in.

You are advised to use liquid ibuprofen (e.g. Nurofen) three times daily and/or liquid paracetamol (e.g. Calpol) regularly, four times daily at the full recommended dose, if needed, during the first few days after surgery. If you are allergic to these medicines, alternatives will be discussed. Please buy these from your pharmacy in advance of your operation, as it is much cheaper than a private prescription. The medicine packages will contain detailed manufacturer's instructions on doses and side effects.

Return to normal activities (e.g. work, nursery, school, college) is usually fine the day following surgery if grommet insertion was the only operation carried out. Strenuous exercise, swimming and physical activity should be avoided for two weeks.

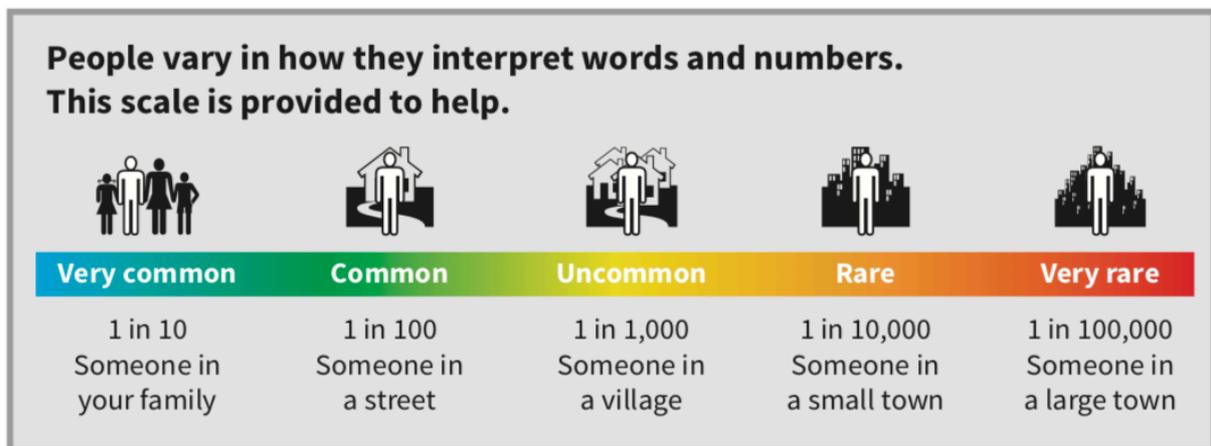
After this, swimming is generally fine, as long as you are not diving under the water, when the pressure can push water through the grommet into the middle ear, causing infection. It is also important to keep dirty, soapy water out of the ears when showering and hair-washing. Avoid lying in the bath with the ears under the water!

If you or your child is a keen swimmer, the audiologist I work with can make silicone customised ear moulds to fit your ears exactly. (The cost of these is generally not reimbursed by medical insurance providers).

You will be given a routine follow-up outpatient appointment, usually for about 4-6 weeks after your surgery, but should bring this forward and come sooner if you have any concerns.

## POSSIBLE COMPLICATIONS

The following is to help you understand the numbers relating to risks of complications:



© The Royal College of Anaesthetists (RCoA) and Association of Anaesthetists of Great Britain and Ireland (AAGBI)

Cough and fever may indicate a chest infection, requiring further treatment.

About 5-10 in every 100 children with grommets will have episodes of infected discharge from their ears; this is more likely if the grommets were inserted for ear infections. The discharge can usually be settled with antibiotics, by mouth and using ear drops. If the problem persists, the grommet itself might have become infected, and sometimes will require removal to allow the infection to settle.

Nausea and vomiting after surgery are uncommon with modern anaesthetic; your anaesthetist will give you anti-sickness medicine are given during the operation.

Allergic and other reactions can occur with any medicine, both during and after the operation; these are uncommon.

Damage to the mouth, tongue, taste buds (with alteration in sense of taste) and teeth are small risks of both the operation and having a breathing tube inserted for the anaesthetic. the operation. When children have loose baby teeth, permission will be sought to remove these if they are very wobbly, to avoid the risk of a tooth being swallowed or inhaled during or after the operation.

The grommets will usually grow out of the ears over a period of 6-12 months; sometimes they will come out sooner or stay in longer. It is uncommon for a grommet not to come out naturally,

requiring another operation in the future to remove the grommet with a small operation under a short general anaesthetic.

In about 1 in 100 patients, the grommet will grow out and the small hole in the ear drum will not heal. (Perforation of the ear drum). This can be repaired with a further operation. Rarely the grommet can grow into the ear drum and require a further operation under a short general anaesthetic to remove the grommet.

Damage to the ear and hearing with permanent hearing loss are rare. The ear often feels a bit “crackly” with popping and squeaking for the first week after surgery; Permanent noise in the ear (tinnitus) is rare.

Rarely, skin from the eardrum can grow into the ear following grommet insertion, causing a collection of skin to grow inside the ear; this is called cholesteatoma and can require further ear surgery to treat the problem.

About 1 in 4 requiring grommets will need more than one set of grommets before they outgrow their ear problems.

In the very unlikely event that you are not well enough to go home following your operation, on the day of surgery, you might need to be transferred to another hospital that has 24-hour ENT nursing and medical staff; this would most likely be to St George’s Hospital, Tooting.

## FURTHER INFORMATION RESOURCES

Grommet insertion – YouTube

**ADVISORY** - THIS VIDEO CONTAINS IMAGES OF THE GROMMET OPERATION

[https://youtu.be/O\\_kJ192w9MU](https://youtu.be/O_kJ192w9MU)

ENT UK – national specialty organisation – patient information

[www.entuk.org](http://www.entuk.org)

Royal College of Anaesthetists/Association of Anaesthetists of Great Britain & Ireland – “you and your anaesthetic”

[www.hdft.nhs.uk/content/uploads/2016/02/you-and-your-anaesthetic.pdf](http://www.hdft.nhs.uk/content/uploads/2016/02/you-and-your-anaesthetic.pdf)

National Institute of Health and Care Excellence (NICE)

Clinical Guideline 60. Surgical Management of OME (glue ear).

<https://www.nice.org.uk/guidance/cg60/documents/cg60-surgical-management-of-ome-full-guideline2>

Mr Peter J Robb, BSc (Hons) MBBS FRCS FRCSEd  
Consultant ENT Surgeon  
GMC 2703855  
<https://ent-surrey.com>

Clinic Appointments

Children

St Anthony’s Hospital 020 8335 4678  
Guildford Nuffield 01483 555 805

Adults

Ashtead Hospital 01372 221 441

Office

01372 275161 option 4

© Text: Peter J Robb FRCS 2019

If you have any feedback or suggestions that could make this information clearer or more helpful, please email these to: [clair@surreymedicalgroup.co.uk](mailto:clair@surreymedicalgroup.co.uk)

© Peter J Robb FRCS July 2019