

Disclaimer

This publication is designed for the information of patients of Thames ENT Services Ltd. The information reflects the clinical practice of Mr Gavin Watters FRCS FRCS(ORL); the information given may not be comprehensive and patients should not act upon it without seeking professional advice.

Thames ENT Services Ltd does not endorse any commercial product or service mentioned or advised herein.

© Gavin Watters 2008

What are grommets?

Grommets are tiny, plastic ventilation tubes which are placed into the ear drum. They are used in the treatment of glue ear, a condition in which the space behind the ear drum (the middle ear) is filled with fluid or mucous ('glue'). This can happen if the Eustachian tube is not functioning properly. The Eustachian tube connects the middle ear to the back of the nose and allows the middle ear space to be ventilated and filled with air. If the tube is not functioning air is absorbed and can be replaced with fluid or 'glue'. A grommet takes over the function of the Eustachian tube and allows the middle ear to be ventilated again.



Ear drum with grommet in place

Why have the operation?

Glue ear is common in children and usually resolves without treatment within a few months. However, in some children the condition persists for longer and can cause problems, particularly hearing loss. This can affect performance at school, speech development and also lead to behavioural problems in some children. Glue ear can also make children more susceptible to ear infections.

Glue ear is much less common in adults but can develop following a cold. Tumours in the nasopharynx at the back of the nose can affect the Eustachian tube. Such tumours are very rare, but adults with glue ear affecting just one side should be referred urgently to an ENT specialist.

What are the alternatives to surgery?

Glue ear almost always resolves as children get older so it is very reasonable to manage the condition conservatively with a 'watch and wait' policy. Approximately 60% of children with glue ear will recover within 3 months but for those who do not, some form of treatment may be required if hearing loss or recurrent ear infections are having a significant impact on the child's development and school performance. Although grommet insertion is a simple and safe procedure, other treatment options can be considered if necessary. Hearing loss can be managed with a hearing aid and a regular, low dose of antibiotics can help reduce the frequency of ear infections. However, antibiotics do not treat the underlying glue ear.

No medical treatments have been shown to be effective in treating glue ear. Adults who develop glue ear following a cold can take a nasal decongestant for 7 to 10 days. If the condition does not resolve within a few weeks grommet insertion or possibly a hearing aid should be considered.

Before the operation

If your child is at school you should inform the school that they will be away for 2 or 3 days. Adults should take the same period off work. In children grommet insertion is often combined with adenoidectomy, in which case a week off school is recommended. As glue ear often resolves without treatment a hearing test will be repeated within 2 weeks of admission. Inform your surgeon if you feel there has been an improvement. If your child has a cold within 2 weeks of admission you should contact the hospital to postpone the operation. Adults may be able to have the operation under local anaesthetic, so should discuss this option with their surgeon.

About the operation

The operation is done under general anaesthetic in children. In adults it may be done under local anaesthetic with an injection into the ear canal. It is done using a microscope through the ear canal. An incision is made in the ear drum, the fluid/glue is sucked out of the ear then the grommet is placed in the ear drum. For both ears the operation takes 10-15 minutes and the patient will then be monitored in the recovery area for a further 20 minutes. For children, a parent can come to the anaesthetic room to be with their child until he/she is anaesthetised. You may also be able to come to the recovery area when your child is awake. Children and adults go home a few hours after surgery.

If a child has an adenoidectomy with grommet insertion the operation will take approximately 20 minutes longer but the child should still go home the same day. Adults may have the nasopharynx at the back of the nose examined with an endoscope and a small biopsy taken. This takes 5 minutes and does not affect the time spent in hospital or the recovery period.

After the operation

There may be mild discomfort in the ear but grommet insertion is not particularly painful. Simple analgesia such as paracetamol should be adequate. Water should be kept out of the ear for 3 weeks. During this period there should be no swimming and when having a bath or shower the ear should be plugged. Cotton wool and Vaseline has been shown to be as good as any other earplug. After 3 weeks it is all right to go swimming, but it is best if the ear is not immersed in water for prolonged periods. If a child likes to swim under water it is recommended they wear a swimming cap or band with earplugs. It is most important to avoid lying in the bath with the ear immersed in water.

cont..

There is no problem flying after grommet insertion. Indeed, having grommets in place avoids discomfort in the ears due to pressure changes.

Possible complications

The main complication is infection. Infection causes discharge from the ear and is usually painless. It is not uncommon and occurs in approximately 10% of patients who have grommet surgery. Infection usually resolves following 5-7 days treatment with antibiotic ear drops, such as Sofradex or Gentisone HC. It is important to keep the ear very dry and not swim if it is discharging. If the ear should discharge within a few days of surgery contact the ward or your surgeon for advice. If infection does not resolve with antibiotic drops or recurs frequently despite observing strict water precautions the grommet may need to be removed.

It is quite common for the ear drum to appear scarred following grommet insertion. This may look like a white plaque on the surface (tympanosclerosis). It is extremely rare for this scarring to cause any problem such as hearing loss. Occasionally the grommet may leave a hole in the ear drum (perforation) when it comes out. Often the perforation will close given time, but if not it can be repaired with an operation (myringoplasty).

How long do grommets stay in place?

Generally grommets stay in place for between 6 and 18 months. They do not need to be removed with an operation and work their way out of the ear drum spontaneously. You may not be aware that the grommet has come out although sometimes the grommet is visible in the ear canal. Your surgeon may offer to remove it from the ear canal when you are seen in the outpatient clinic.

What happens when the grommet comes out?

It is hoped that by the time the grommet comes out the Eustachian tube will have started to function normally and fluid/glue will not return. Over 60% of children who have grommets inserted will have no further problems. There is evidence that combining grommet insertion with adenoidectomy reduces the likelihood of further grommet insertion. However, a minority of children will have a recurrence of glue ear and may require further grommet insertion. The long-term outcome for adults is less predictable and depends on the cause of Eustachian tube dysfunction.