You have been diagnosed with a condition called Meniere’s disease. This leaflet will help you to understand Transtympanic Gentamicin treatment for severe vertigo.

**What treatment available for severe Meniere’s disease?**

There are several surgical treatments available to treat patients with severe symptoms of vertigo from Meniere’s disease that is not controlled. They include injecting/instilling Gentamicin into the middle and inner ear (Transtympanic Gentamicin Treatment sometimes also called Chemical Labyrinthectomy), destroying the affected balance organ (Radical Labyrinthectomy) and cutting the balance nerve (Vestibular Neurectomy). Both radical labyrinthectomy and vestibular neurectomy are reserved for very severe cases where other forms of treatment fail and they carry higher risk of side effects/complications from surgery.

**Transtympanic Gentamicin Treatment:**

Gentamicin is a group of antibiotics called aminoglycosides prescribed to treat serious infections either on its own or combined with another antibiotic. One of its side effects includes vestibular (balance) and auditory (hearing) damage. This side effect of vestibular damage is used to treat patients with severe Meniere’s disease with uncontrolled vertigo symptoms. Since Gentamicin can also produce damage to hearing, patient’s hearing will need to be monitored during treatment.

**How Gentamicin is introduced to treat Meniere’s disease?**

Gentamicin can be introduced as an injection through the tympanic membrane or as ear drops instilled in the ear canal. Gentamicin solution has to be prepared freshly to use in the ear. Injection can be done in the outpatient department when the patient is awake which some patients would find difficult to tolerate. To use the ear drops, a special grommet and a wick (Silverstein MicroWick™) needs to be placed in the ear drum under General Anaesthetic (GA) as a day case. Operation under GA will help the surgeon to place both the grommet and the wick in the correct place for the drops to be introduced and absorbed into the inner ear where hearing and balance organs are situated.

**What do I expect with this type of treatment?**

The doctor who treats you in the ENT clinic will assess your condition to see whether you would be a suitable candidate for Intratympanic Gentamicin Treatment. You will have a balance test (Vestibular Function Test) and an up-to-date hearing test to assess your hearing and balance. You will be given a date for the operation (Insertion of Grommet and Silverstein MicroWick) as a day case. After the operation you will be sent home with a bottle of freshly prepared Gentamicin ear drops to use three times a day for one week. You will be asked to discard the bottle after using the solution for one week and asked to get another bottle of freshly prepared Gentamicin ear drops.
prepared Gentamicin solution from the hospital pharmacy to use for the second week.

At the end of second week, you will be seen in the ENT Clinic to remove the wick and the grommet to allow the ear drum to heal. A hearing test will be done at this visit to measure your hearing and to compare it with previous test result. During the two weeks treatment if you feel that you are losing your hearing, you must contact the ENT Clinic on 01246 512098 to arrange an urgent clinic appointment with a hearing test and you should stop using the ear drops any further until you see the ENT doctor in the clinic.

Are there any side effects of this treatment?

As previously mentioned, the main side effect is hearing loss and this hearing loss can be both total and permanent. In addition, you may develop pain and discomfort which can easily be treated with simple analgesics such as paracetamol. Rarely, the ear drum after removal of grommet and MicroWick may fail to heal leaving a perforation and potential ear infection. However the chance of this happening is low.

What is the success rate and how often I need to have this treatment?

In 75% of patients, one treatment is enough to control the symptom of severe vertigo. Remaining 25% of patients may need more than one treatment. In such patients, this treatment can be repeated after a period of 6 months.

The tinnitus symptom may or may not improve following Gentamicin treatment.

Any further questions?
If you have any further questions to ask, please contact Mr A Chidambaram, Consultant ENT Surgeon’s CAO on 01246 513140 or contact ENT Clinic on 01246 512098.