Ménière’s disease is a most unreliable and disorder with a fluctuating and individual course. There is an incidence of 4–50/100,000 patients in western countries. Most patients seem to stop having acute attacks within 5~10 years during which time span the hearing deteriorates. Although the benign nature of the disorder, it is a most disturbing malady that may lead to disability and even suicide. Traditionally, when conservative treatment have failed, one has turned to surgical approaches such as saccus decompression, vestibular nerve section and labyrinthectomy. There is a multitude of treatments for Meniere’s disease, where the majority has not been validated in controlled studies. This is partly due to the individually varying course of the disease, as well as prominent placebo effect by any approach also surgical or topical. According to a survey in Britain 94% of surgeons prescribe betahistine, 63% diuretics and 71% advise salt restriction and 50% may insert a grommet. If needed, 2/3rd would recommend the use of gentamicin.

Topical treatments may be considered as an alternative to surgical procedures after conservative treatments failed. One may also consider inserting a grommet as a topical treatment. There have been a few studies advocating such an approach and in our experience several cases may go into shorter or longer periods of remission. Instalment of streptomycin to the middle ear for treating Meniere’s disease, was reported in 1957 by Schuknecht. It was mostly abandoned due to the very high frequency of severe hearing loss. In 1977 Lange introduced the change to gentamicin with repeated instalments. He reported preserved hearing in 76% of patients. The procedure was spread slowly in continental Europe, later Japan and in UK and US in the mid 90’s. Initially doses were repeated once to several times daily, until there was signs of vestibular damage. In 1991 it was demonstrated that there was a delay of several days in the onset of the vestibular damage and the low dose therapy was. This developed into two variations; where either 1~2 instalments were administered and the patient would be seen in 2–4 weeks or repeated instalment one week apart until signs of a reduced vestibular function appears. However, occasionally patients reported severe and prolonged dizziness after the vestibular loss. To meet this problem we developed the ‘vestibular prehab’ algorithm where patients do vestibular and balance exercises for at least 2 weeks before instalments and continue doing them for 6 weeks past. Most patients experience only slight or ignorable discomfort while losing vestibular function. With this approach, we control vestibular symptoms in 89% of cases, with severe hearing loss in only 2~3%.

Topical treatment with gentamicin, will and aim to ablate vestibular function to curb attacks of vertigo in the ongoing Meniere’s disease. Application of corticosteroids to the middle ear on the other hand, aim to control or suppress the not to well known disease process without destroying sensory function. Middle ear application of corticosteroids with a favourable effect on Meniere’s disease, was first reported by Sakata in 1986. It gained popularity in the beginning of the new millennium. It was used both in the control of Meniere’s disease and as a salvage procedure for sudden deafness or hearing loss of unspecific origin. However, in contrary to the case with gentamicin, it has not yet been validated. In our experience, Transtympanic steroids seem to suppress and ameliorate the disease, but as expected, the long term effect is less definitive.
Although Gentamicin and steroids are the most frequently used, other drugs have been applied to the middle ear for treating Meniere’s disease. Lidocain and other local anesthetics have been used in the 50s–60s. Recently the progesterone inhibitor latanoprost has been tried with some success. As Meniere’s disease is an elusive disorder, we should expect further suggestions of substances to install into the middle ear. Hitherto, there are good evidence that carefully administered gentamicin, especially combined with ‘vestibular prehab’, is an efficient way to control refractory Meniere’s disease. Corticosteroids offer a possibility to suppress the disease but with somewhat lesser long term results.

REFERENCES