

#### **Ménière's Disease - John Phillips, ENT Consultant (NNUH)**

Ménière's Disease is named after a 19th century French physician, Prosper Ménière. Ménière first noticed the now classic collection of symptoms (hearing loss, tinnitus and vertigo) in his colleague. Ménière attempted to treat his patient with numerous methods, but to no avail - this later was explained by the discovery that Ménière's colleague in fact had leukemia, not Ménière's Disease. However, the physician's name is still used to describe the illness.

There have been numerous 'explanations' for Ménière's Disease over the years. For a long time, Charles Hallpike's hypothesis of it being caused by a swelling within the labyrinth membranes in the ear held sway. Hallpike believed that in a Ménière's attack, the ear membranes ruptured and the chemicals within the different areas of the ear mixed, causing the symptoms. However, this has been disputed - if the attack is caused by the mixing of chemicals, how do these liquids 'unmix' themselves again to 'stop' the attack? Also it has been found that hydrops (fluid accumulation) is not present in all Ménière's Disease patients, but is present in some non-Ménière's Disease patients. Another theory suggests that Ménière's Disease is caused by a problem in the endolymphatic ducts in the ear (the area connected to the immune system).

There is no 'cut and dry' test to establish a diagnosis of Ménière's Disease. Instead, most professionals use the 4-part definitions provided by the American Academy of Otolaryngology - Head and Neck Surgery:

- Certain Ménière's Disease: unfortunately, this diagnosis can only be made at autopsy, by examining the ear structure! Physical changes to the ear can be seen (widening of the labyrinth areas) in patients with Ménière's Disease.
- Definite Ménière's Disease: patient has had at least 2 separate, spontaneous episodes of vertigo, each lasting a minimum of 20 minutes; documented hearing loss; tinnitus / aural fullness; other causes ruled out.
- Probably Ménière's Disease: patient has had 1 episode of vertigo, lasting at least 20 minutes; documented hearing loss; tinnitus / aural fullness; other causes ruled out.
- Possible Ménière's Disease: patient has experienced 1 episode of vertigo, lasting at least 20 minutes, but has no documented hearing loss OR has documented hearing loss but no clear episode of vertigo.

Patients presenting with the symptoms of Ménière's Disease will be asked for a full medical history, given an examination and an audiogram (hearing test), and possibly also an MRI to discount other causes for the symptoms. Other (less common) methods of diagnosis include use of calorics (stimulating the middle ear using warm and cool water), electrocochleography (eCogs), or Vestibular Evoked Myogenic Potential (VEMPs - neck contraction measurements).

Prosper Ménière listed all sorts of remedies for Ménière's Disease, including soda water, tonics, blistering plasters and leeches, to name a few...needless to say, they did not have the desired effect! Another historic treatment was use of a 'seton' - a large curved needle to which was attached a salt solution-soaked string. This was threaded through the back of the neck skin to try and get the salts into the body. You will be relieved to hear that this (and 'moxa' - cotton pyramids soaked in potassium chloride which were burned in the ear to draw out evil spirits) have not stood the test of time as treatments!

Treatment today depends a lot on how far the individual patient is along the 'road' of Ménière's Disease. Acute Ménière's Disease can be treated with vestibular sedatives. Patients in the early stages of Ménière's Disease can try a hydrops diet, take an histamine antagonist (a drug to stop the histamine receptors working) or vestibular rehabilitation (balance therapy). They can also benefit from reassurance and clear, helpful information. The Ménière's Society ([www.menieres.org.uk](http://www.menieres.org.uk)) can be very helpful with this.

Professionals seeing patients further down the 'road' have two options:

- Non-destructive treatments: meniett treatment (changes in ear pressure); endolymphatic sac surgery (to reduce fluid pressure) or intratympanic steroids (drugs injected into the middle ear).
- Destructive treatments: intratympanic Gentamicin, labyrinthectomy (removal of balance organs) or vestibular nerve section (cutting the balance nerve).

The drug OTO-104 has been developed by Otonomy in the USA, and is now being trialled in the UK. Norwich is hosting this study. The drug Dexamethasone is created as a gel, and injected into the ear. The gel allows for a higher concentration of the drug to be used, and for sustained drug exposure (in comparison to the current steroid injections). It is hoped that this study will open up a new avenue of treatment for people with Ménière's Disease.

### **Next TSG meeting**

Our next meeting will be on Wednesday 3rd December 2014, starting at 2pm. We will be welcoming Robert Black, Psychological Services Manager at Norwich and Central Norfolk Mind. Mr Black will be giving us an 'Introduction to Mindfulness for Tinnitus' - a technique that many have found to be a great help. Come and join us for what promises to be a brilliant session.

If you have any comments or questions regarding the Tinnitus Support Group, please contact:  
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