

INFORMATION ON MÉNIÈRE'S SYNDROME (DISEASE)

In 1861 Dr Prosper Ménière described this condition which bears his name. He correctly described this condition as due to a disturbance of the inner ear. He described this in a patient with Ménière's syndrome (disease).

"A man, young and robust, suddenly without reason, experienced vertigo, nausea and vomiting. He had a state of inexpressible anguish and prostration. The face was pale and bathed in sweat as if about to faint. Often, and at the same time, the patient, after seeming to stagger in a dazed state, fell on the ground unable to get up. Lying on his back he could not open his eyes without his environment becoming a whirlpool. The smallest movements of the head worsened the feeling of vertigo and nausea."

Ménière's description of the vertigo which accompanies a severe attack of Ménière's disease cannot be bettered although many people do not experience this extreme form.

We now know that the condition is caused by an increase in the pressure of fluids in the inner ear. The cochlea (concerned with hearing) and semi-circular canals (concerned with balance) are filled with fluid which is called endolymph. Periodic increases in the pressure of the endolymph (also described as endolymphatic hydrops) results in such swelling in the inner ear that breaks in the inner ear membranes can occur. These breaks produce a dramatic disturbance of the hearing and balance at the same time. In addition to the giddiness or vertigo there is a reduction of hearing in the affected ear, together with tinnitus, which is generally low pitched or rushing. There is usually nausea, and sometimes vomiting also. This may be severe for up to a day. Whilst the giddiness usually resolves over a week, there may remain some imbalance, as well as hearing loss, a feeling of blockage in the ear, and some degree of tinnitus. Attacks may occur frequently over a period of weeks to months, but usually they do settle and there may well be long periods of time when the patient is entirely free of symptoms. However symptoms can recur. Hearing can gradually deteriorate also. It is very rare that the giddiness does not improve and again it is rare that the hearing does not improve although some degree of hearing loss and tinnitus may remain.

Low Incidence

The full blown condition affects about 1 in 20,000 of the population. It is more common in men than women. If the condition is untreated, the hearing tends to become progressively worse, although in the early stages the hearing often returns to near normal levels.

Although tinnitus can be a distressing part of Ménière's disease, particularly in the later stages, it is usually the vertigo and vomiting that trouble the majority of patients. The attacks are unpredictable.

Diagnosis

Many patients with Ménière's disease are successfully diagnosed and treated by their general practitioner. There are, however, many more common causes for vertigo which can be misdiagnosed as Ménière's disease. Sometimes the term is used quite wrongly as a diagnosis for any kind of balance disturbance. It is important to make sure that you do have this condition, and not something else, as there are some very specific treatments for Ménière's disease which do not work in other conditions, and vice versa.

Here are some specific features of Ménière's disease:

1. It first appears in relatively young people (usually around the age of 30).
2. If your first attack of vertigo is in your 70s then it is likely to be something else.
3. It is usually, but not invariably, associated with hearing symptoms in one ear, for example, fluctuating hearing in the low frequencies, tinnitus and sensitivity to sound.
4. The hearing symptoms should occur at or around the time of the attacks of vertigo.
5. The hearing symptoms are usually experienced in one ear, not equally in both ears.
6. It is quite common to have a feeling of pressure in the affected ear before or during the attack. Sometimes this is the worst symptom.
7. The attacks of vertigo usually last from two to twenty-four hours. The spinning is often very fast and is often aggravated by moving the head. It is often accompanied by nausea, vomiting, and sometimes diarrhoea, although these symptoms may get better as time passes.
8. There are often other symptoms such as sweating, palpitations and anxiety associated the attacks. These symptoms can accompany any severe vertigo.
9. There are periods of "remission" when patients feel quite normal. These may be as short as a few days or longer than ten years.

If you have many or all of these symptoms, then it is very probable that you do have Ménière's disease. If your symptoms of vertigo are very different, then it is important to question the diagnosis of Ménière's disease. Where possible, it helps to have some special tests performed to be quite certain that the diagnosis is correct. A hearing test (pure tone audiogram) measures the hearing in each ear, at different frequencies and is used to diagnose Ménière's disease. Many who have Ménière's disease suffer from severe discomfort from loud sounds, although their hearing is impaired, and this feature (sometimes called recruitment or hyperacusis) can be measured (by other hearing tests).

Investigation of the giddiness is complicated and takes a long time. One test that is commonly performed is the caloric test (a test of vestibular (balance) function). Each ear is gently irrigated with water (or air), which is at a slightly different temperature from that of the body. This changes the temperature in the inner ear fluids, causing them to move in one or other direction. Examination of eye movements during this procedure can show how well the balance mechanism in each ear is working. In Ménière's disease there is often a reduction in the function of the affected ear on caloric testing. Many patients have an understandable fear of this investigation, as it might produce slight giddiness for a minute or so. However, it is an important investigation. It is not distressing if it is performed with care and it yields important diagnostic information, which can help in the patient's further management.

Management of Ménière's Disease

Many forms of treatment are very effective, and may bring about long periods of freedom from the condition. After a while many patients cease to have disabling vertigo. But as treatment may be needed over a long period of time, it is important to find a doctor with an interest in the condition, and heed his or her advice about what may be a continuing programme of treatment and care.

Dietary Factors

Because there is an increase in fluid pressure in the inner ear, most patients benefit from reducing salt intake which can cause fluid retention. Some specialists recommend keeping the general fluid intake down as much as possible and also steering clear of caffeine (although this is not proven). Salt substitute can be obtained at chemists and used in cooking, but should not contain any sodium. Tonic water and aspirin can sometimes make the tinnitus worse. However if you are taking Aspirin to prevent a heart attack or stroke it is obviously important to keep on Aspirin.

Medical Treatment

No two patients with Ménière's disease are alike as the frequency of attacks and course of the condition are very unpredictable. It is often hard to say whether the treatment is being effective as there are often emotional factors at work. Even the calm assurance of a competent practitioner sometimes produces periods of remission.

Betahistine (Serc) probably helps more Ménière's patients than any other drug, and is said to have a direct action on the endolymph production in the inner ear - usually 16mgs three times a day. Most patients with Ménière's disease will have tried it and it can be taken for long periods of time without ill-effect. Betahistine should be taken in combination with a salt-free diet and should be given initially over a period of some months and occasionally years.

Prochlorperazine (Stemetil). Some patients who have severe attacks of vertigo need strong anti-vertigo drugs such as Stemetil. It is often useful to have these available as a tablet to be taken underneath the tongue (Buccastem) as this is directly absorbed into the blood stream and does not have to go via the stomach (a problem if the patient has vomiting). Suppositories can also be used. If attacks occur very infrequently it is much better not to take Stemetil-like preparations on

a regular basis but to rely on tablets or suppositories which can be used to give rapid relief as soon as the onset of an attack can be predicted. There are a very large number of different anti vertigo tablets, many of which may be helpful at one time or another and successful treatment is often a matter of identifying the drug most helpful to the individual.

Hearing Loss

This usually affects only one ear, and while there is one normal ear there may well be no difficulty in hearing in normal situations. In a minority of patients Ménière's disease may develop in the second ear. A trial of a suitable hearing aid should always be offered to anyone with a hearing difficulty. Digital hearing aids are available via the National Health Service. Occasionally loudness discomfort is a serious problem and, when one ear is affected, a good fitting earplug (such as the EAR plug) may be helpful in very noisy environments. Ear plugs should not be used however for sensitivity to normal every-day sounds as this can make the sensitivity to loud sounds worse.

Tinnitus

Although tinnitus is not usually the most troublesome symptom, it is often relatively simple to treat in Ménière's disease. The tinnitus in Ménière's disease may be easily managed by a suitable white noise generator and counselling (tinnitus retraining therapy - TRT) and often by a hearing aid alone. Patients with Ménière's disease whose vertigo responds to Serc may also experience a reduction in tinnitus. Some people have tried the health food remedy Ginkgo Biloba for the management of tinnitus although there is no strong evidence that this is particularly helpful.

Gentamicin Ablation of the Inner Ear

This involves placing local anaesthetic in the ear canal and then injecting Gentamicin into the middle ear. This then diffuses into the inner ear and can destroy the part of the inner ear responsible for balance (and the attacks of giddiness) whilst preserving hearing. It is performed as an out-patient procedure but may have to be repeated over several weeks to get the best effect.

Surgical Treatment

Surgery on the inner ear is possible in people with severe Ménière's disease. This includes drainage of the endolymphatic sac, vestibular nerve section or inner ear destruction (labyrinthectomy). This should only be performed in people with very severe Ménière's disease and not in people with any useful hearing in the affected ear. The endolymphatic sac is a small cul-de-sac coming from the inner ear, which acts as a "kidney" to the inner ear helping to remove its waste products and control pressure change. The drainage or decompression of this sac is often effective at controlling vertigo and sometimes results in an improvement in the hearing and tinnitus, at least in the short term. This operation can be repeated (sometimes after a few years) if the drainage tube becomes blocked with subsequent further improvement in the vertigo. It is well worth going to a centre where there is a special interest in treating Ménière's disease because true Ménière's is such a rare condition that not all ear surgeons have experience of doing this operation.

Conclusion

Ménière's disease is a problem affecting the inner ear which can cause severe giddiness (vertigo) often with nausea, vomiting, hearing loss and tinnitus. It often gets better with time, but there are many patients in whom therapy can be helpful. Gentamicin injection into the ear can especially be helpful in patients severely affected with Ménière's disease.

More Information

RNID information lines (Freephone)

Information Line offers free confidential and impartial information on a range of subjects including tinnitus, employment, equipment, legislation and benefits, as well as many issues relating to deafness and hearing loss. There is also a dedicated Tinnitus Helpline.

19-23 Featherstone Street, London EC1Y 8SL

Telephone: 0808 808 0123

Textphone: 0808 808 9000

Email: informationline@rnid.org.uk

You can contact the Tinnitus Helpline free by voice or textphone, or send an email, fax or letter:

19-23 Featherstone Street, London EC1Y 8SL

Telephone: 0808 808 6666 (freephone)

Textphone: 0808 808 0007 (freephone)

Fax: 020 7296 8199

Email: tinnitushelpline@rnid.org.uk

Useful websites (based on article in the Journal of Otolaryngology and Laryngology - Ménière's Disease Support and Information: What website? JLO Oct; 117(10):780-3 2003. Sen P, Papesch M)

<http://oto.wustl.edu/men>

<http://www.tchain.com/otoneurology/disorders/menieres/menieres.html>

<http://www.menieres.co.uk>

Is There Any Evidence For Complementary And Alternative Therapy In Ménière's Disease. Sen P, Papesch M. *The Internet Journal of Otorhinolaryngology*. 2005. Volume 4 Number 1

<http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijorl/vol4n1/meniere.xml>