

Triggers and Treatments (Part Six)

Medications for Ménière's

By

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Your doctor has just confirmed a diagnosis of Ménière's Disease for you. What's next? Usually a course of 'treatments.' What kind of treatments? We recently completed our look at *Lifestyle Changes*, so let's move on to *Medications*.

A Word of Caution

The word 'medication' comes from the word 'medicine,' which explains these definitions —

- a substance used for medical treatment, especially a medicine or drug Oxford Languages
- a medicinal substance Merriam-Webster
- a medicine, or a set of medicines or drugs, used to improve a particular condition or illness Cambridge Dictionary
- Medication is medicine that is used to treat and cure illness Collins Dictionary
- the act or process of treating a person or disease with medicine Britannica Dictionary

You may have heard the saying, "Let food be thy medicine, and let medicine be thy food." It's often attributed to the ancient Greek physician Hippocrates. We've addressed the importance of nutrition for Ménière's patients, but is there a place for modern medicine as well? Most doctors I've met would says 'yes,' but many are aware of potential dangers and are careful to explain those dangers to their patients.

- Chemical medications often have side effects. Some are common side effects, some are known as uncommon, and some are rare. Check with your doctor or pharmacist, then do your own research. It's your body, your health.
- Some people may be allergic to the active or inactive ingredients in medications. Be sure to ask about what's in the medications your doctor prescribes. If you have any concerns, discuss them with your doctor and pharmacist.
- If you are taking medications for other health problems, ask your doctor about the potential for increased side effects with medications for Ménière's. The more medicines you take, the higher possibility of potentially

- serious side effects. Those may include increased confusion, dizziness, and risk of falling.
- Another issue you may face with medications is 'drug interactions.' That's where medications can interact with each other in ways that may be harmful to you. Drug interactions can also cause some medications to be less effective. Talk with your doctor and pharmacist about how medications you're taking for other health problems may impact your Ménière's medications.
- Alcohol and other substances can have negative impacts when used with some medications. Be sure to read the warnings included with your medication.
- Older people often process medications differently than younger people. That includes the way your kidneys and liver work with medications. If you're in your 60s, 70s or older, discuss those concerns with your doctors and pharmacist.

You can search for prescription medications or over-the-counter medications (OTC) online before purchasing. You can also use websites like these to check for medication side effects and drug interactions —

Drug Side Effects Checker (Drugs.com)

Daily Med Checker (DailyMed.com)

Drug Interactions Checker (Medicine.com)

Drug Interaction Checker (RxList)

Drugs Interaction Checker (WebMD)

Drug Interaction Checker (Medscape)

Now, let's look at some of the medications your doctor may prescribe to help you deal with Ménière's.

Medications for Ménière's Disease

Here is a small amount of the information available from a variety of sources concerning medications that doctor's prescribe for Ménière's patients —

- Motion sickness medicines. Medicines such as meclizine (Antivert) or diazepam (Valium), may lessen the spinning feeling and help control nausea and vomiting.
- Anti-nausea medicines. Medicines such as promethazine, might control nausea and vomiting during a vertigo attack.
- Diuretics and betahistine. These medicines can be used together or alone to improve vertigo. Diuretics lower how much fluid is in the body, which may lower the amount of extra fluid in the inner ear. Betahistines ease vertigo symptoms by improving blood flow to the inner ear.

 Your health care provider may prescribe a medicine to reduce fluid retention and suggest limiting your salt intake. This helps control the intensity and amount of Meniere's disease symptoms in some people. <u>Mayo</u> Clinic

Healthcare providers may start with treatments to reduce pressure on your inner ear from high endolymph levels. They may also prescribe medications to help with vertigo, including:

- Diuretics: This medication reduces the amount of fluid in your body. Reducing fluid overall may bring down inner ear fluid levels.
- Motion sickness medications: These medications help control vertigo episodes.
- Antihistamines: This medication may reduce vertigo attacks
- Intratympanic steroid injection: A medical provider may inject steroids through your eardrum as a means of controlling episodes of Ménière's disease. <u>Cleveland</u> Clinic

Medications that are effective for Meniere's disease include:

- Diuretics are the most commonly prescribed maintenance medications for Meniere's disease. Diuretics work by restricting the overproduction of fluid in the inner ear. Diuretics are long-term medications. They help reduce the number of vertigo attacks, and in some cases, they help stabilize hearing. Commonly used diuretics are Diamox (acetazolamide) and Dyazide (triamterene/HCTZ).
- Meclizine (Antivert or Bonine) is the most commonly
 prescribed medication for the control of
 vertigo. Dramamine, available over-the-counter, is milder
 but might also be effective.
- Valium in small doses may be helpful when other medications fail to control the vertigo. <u>Mount Sinai</u> <u>Hospital</u>

Your clinician may prescribe medications to use when you have an attack. These medications do not lower fluid pressure in your inner ear, but they do provide symptom relief. They include:

- Antiemetics to reduce nausea and vomiting
- Vestibular suppressants to reduce vertigo and anxiety associated with attacks

Medications can also help prevent and reduce the frequency of Ménière's disease attacks. They include:

- **Diuretics** to reduce fluid build-up in the inner ear
- Migraine medications, due to the overlap of migraine and Ménière's disease — Stanford Health Care

Ménière's disease is also called idiopathic endolymphatic hydrops. It is a problem with the inner ear. It's one of the most common causes of dizziness that starts in the inner ear. Only one ear is usually involved, but both ears may be affected. Certain medicines can help manage the symptoms of this disease. Some help reduce fluid pressure in the inner ear. Others help ease symptoms themselves. There is no known medicine that will cure Ménière's disease and no one medicine that is right for everyone. Discuss your options with your healthcare provider.

Fluid buildup in your inner ear often causes the symptoms of Ménière's disease. Medicines called diuretics rid the body of excess fluid. By doing so, they may help reduce fluid buildup in the ear. Diuretics may cause your body to lose an important mineral called potassium. Because of this, you may also need to take dietary supplements.

Certain medicines can help control symptoms. They include:

- Antidizziness medicines. These help relieve vertigo.
- Antinausea (also called antiemetic) medicines. These help ease nausea and vomiting.
- Sedatives. These help you relax and sleep during a vertigo attack.

Attacks often cause nausea and vomiting. So these medicines may be given in the form of a rectal suppository. This helps makes sure that the medicine stays in your system even if you throw up. Saint Luke's Health System

The most commonly used maintenance medications for Ménière's disease are diuretics, such as Diamox Sequels (acetazolamide extended-release capsules) and Dyazide (triamterene/HCTZ). These medications relieve the inner ear fluid build-up thereby reducing vertigo frequency and avoiding hearing loss

progression. Acetazolamide (a carbonic anhydrase inhibitor) alkalinizes urine, encourages kidney stone formation, and increases ammonia reabsorption and hypokalemia risk. The usual counseling points of Dyazide for hypertension apply to its use in Ménière's disease. Little evidence exists investigating similar regimens. The single double-blinded cross-over study supporting Dyazide found no impact on hearing loss, but patients expressed an unspecified preference over placebo. Loop diuretics are less favored because of their ototoxic effects.

Providers often recommend or prescribe meclizine (OTC Bonine and prescription Antivert) to control vertigo as needed. Dramamine is less effective, but patients may prefer it to Bonine. Bonine "motion sickness only" labeling and Antivert are FDA approved for vertigo. A patient may use 12.5 mg to 50 mg up to 3 times daily. The reasoning behind this labeling differences is from the possibility for serious causes of vertigo (eg, stroke or ototoxin consumption). Transient ischemic attacks can present as periodic dizziness and headache for

months prior to a larger stroke. This presentation is difficult to differentiate from combined Ménière's disease with migraine. Pharmacists should recommend provider consultation if a patient wants to use Bonine for vertigo without a prescriber's approval.

Small doses of diazepam or lorazepam, promethazine (oral or rectal), and dexamethasone are used infrequently for treatment-resistant vertigo. Benzodiazepines are most effective for patients triggered by stress. Promethazine treats vertigo-induced nausea. The rectal suppository formulation has lower bioavailability and slower absorption than the oral syrup, so prescribers should reserve it for patients unable to take medications orally. Oral dexamethasone can reduce inner ear swelling and provide symptomatic relief. Pharmacy Times

Drug therapy can play an important role in the treatment of most Ménière's disease patients. Betahistine is of benefit and, unlike sedative alternatives, does not interfere with the development of vestibular compensation. Diuretics can also be of benefit, although the use of acetazolamide in Ménière's disease is still controversial. When the transition from acute to chronic treatment fails to alleviate symptoms, mild vestibular sedatives such as cinnarizine may be of help.

Where an inflammatory component is suspected in bilateral Ménière's disease, short courses of systemic glucocorticoids may be appropriate. It recently has been shown that glucocorticoids not only influence inflammatory process in Ménière's disease, but also alter fluid dynamics via an interaction with the sodium pumps in the semicircular canals (Ponduglula et al 2004). Intra-tympanic application of corticosteroids appears to have only temporary effects and is probably not recommended.

Anti-depressive treatment (eg, selective serotonin reuptake inhibitors) may improve the psychological handicap aspect of vertigo in pre-existing depression, but is of no benefit to vertigo itself nor in patients without pre-existing depression. Where anxiety and stress susceptibility exacerbate the condition, short courses of benzodiazepines (eg, alprazolam or serenase) can be administered, but dependence is a concern during the longer term. National Library of Medicine

Below is an overview of the medication often prescribed for vertigo. This information is not intended to replace specific medical advice from your GP, consultant, specialist or pharmacist, but to give a general description of the medication currently prescribed. You should always check with your medical professional for information and advice relating to your symptoms/ condition and treatment.

- Betahistine
- Prochlorperazine
- Cinnarizine
- Cinnarizine and Dimenhydrinate
- Domperidone <u>Menieres.org.uk</u>

Clinically, treatment options for patients with vertigo include symptomatic, specific and prophylactic approaches. Symptomatic treatment involves controlling the acute symptoms and autonomic complaints (e.g., vertigo and vomiting). Specific treatment involves targeting the underlying cause of the vertigo (e.g., ear infection). Prophylactic treatment aims to reduce the recurrence of specific vertiginous conditions, as in Ménière's disease, migrainous vertigo or vestibular paroxysmia.

There are six major groups of medications that can be used to treat vestibular symptoms such as vertigo and dizziness: antiemetics; anti-inflammatories, anti-Ménière's, anti-migrainous; antidepressants and anticonvulsants. <u>Vestibular.org</u>

Anything New?

People with Ménière's often ask me if I've heard of any new medications being tested? I have. However, many fail during clinical trials (<u>example</u>), so it's good to stay on top of those trials to see what works and what doesn't.

Here are some medications currently in various stages of clinical trials —

- SPI-1005 from Sound Pharmaceuticals. The company recently "completed enrollment in its first Phase 3 clinical trial." You can read about more about it here.
- Spiral Therapeutics, Inc. is involved in an investigational clinical trial in Australia. The drug is known as SPT-2101 and is a "sustained-release steroid formulation designed for precise inner ear administration."
- Serotonin and Norepinephrine Reuptake Inhibitor (venlafaxine)
- Nortriptyline-Topiramate Stepwise Regimen <u>UCH</u>
 <u>Clinical Trial</u>

Continuous Ambulatory Vestibular Assessment —
 ClinicalTrials.gov

I'm curious, but skeptical about new treatments for Ménière's. By using the word 'skeptical' as a journalist, I don't mean that I can't be convinced that something is true or that it works as advertised. I simply mean that I am skeptical until I see the evidence that demonstrates efficacy. As Dr. Timothy Cain wrote earlier this summer —

In general, it is best to be very skeptical about new treatments for Meniere's. Because the disease fluctuates, very large numbers are needed to prove that a treatment is effective. In other words, one can easily by chance have a sequence of patients who do well on any particular regimen, medication or device, which is actually a placebo. There are many Meniere's treatments which are probably placebos. Considerable data supporting the placebo idea has been put forth by Torok (1977) and Ruckenstein (Ruckenstein et al. 1991). There is very little evidence that any currently available treatment, whether it be medical or surgical,

changes hearing. (Am J Otol 18:67-73, 1997). <u>Dizziness-and-Balance.com</u> We'll look at **Medical Devices** and **Surgical Procedures** in the next *Managing Ménière's Disease* newsletter.

"... rejoicing in hope, patient in tribulation, continuing steadfastly in prayer." Romans 12:12

Here's to hope!