**Patient Information**

**Meniere’s Disease**

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**What is it and why do I have it?**  
Meniere’s disease is caused by an abnormality of the fluid in your inner ear – either the amount of the fluid or the composition of the fluid. We don’t always know why people develop this condition but it has been known to run in families and has also been associated with viral infections, abnormal immune responses, or head trauma. It can occur at any age, but is seen mostly in the range of 20-60 years of age.

**What are the symptoms?**  
Although Meniere’s is frequently referred to as a disease, it is actually a syndrome or a collection of four different symptoms: 1) spells of visual whirling vertigo lasting typically anywhere from 20 minutes to several hours, 2) loud tinnitus (ear noise) in one ear, 3) intense pressure in one ear (aural fullness), and 4) a fluctuating hearing loss in one ear that may progress to more permanent hearing loss. Most patients have nausea and vomiting during these episodes and are essentially disabled during the peak of the spell. Some patients may feel off balance for a day or two following the severe portion of the spell. Sometimes Meniere’s patients have some warning of an impending spell as they will develop the ear noise, ear pressure or drop in hearing hours or even a day or so before the vertigo starts.

**How do I know if I have Meniere’s disease?**  
Meniere’s can usually be diagnosed by the description of your symptoms and can sometimes be confirmed by a hearing test performed in the time period that your hearing is affected. Meniere’s will often cause a low frequency hearing loss. Meniere’s is often diagnosed after you have established a pattern of the symptoms. Although we may suspect Meniere’s after just one attack, it usually takes more than one attack for a diagnosis of Meniere’s to be made more definitely. There is no specific test to be performed that will diagnose Meniere’s disease; however, we frequently order balance testing (VNG) to further assess your inner ear to help guide us in your treatment plan. Sometimes an MRI will be ordered to rule out other problems that can cause dizziness and hearing loss.

**How is it treated?**  
There is no known cure for Meniere’s although research is being performed here at OSU and at other major medical institutions. However, there is treatment available mainly targeting vertigo symptoms:

1) **A low salt diet** is very important for Meniere’s patients as too much salt can alter the amount of fluid in your inner ear and trigger further attacks. Meniere’s patients should have no more than a total of 1500-1800 mg (milligrams) of salt per day. Typically it is the hidden salt in our foods that add up. You will need to start reading food labels to control your sodium intake and in general avoid highly salted foods.

- $\frac{1}{4}$ teaspoon = 575 mg of sodium
- $\frac{1}{2}$ teaspoon = 1,150 mg of sodium
- $\frac{3}{4}$ teaspoon = 1,725 mg of sodium
- 1 teaspoon = 2,300 mg of sodium

Other dietary changes may include avoiding caffeine, chocolate, alcohol and MSG.

2) In addition to the low salt diet a **water pill (diuretic)** is often prescribed to keep excess fluid from settling in your inner ear. Our office most commonly prefers to prescribe Dyazide or Maxzide (a combination of Triamterene and hydrochlorothiazide) as this particular diuretic has been studied the most when it comes to Meniere’s patients and it has two components – one which is potassium-sparing and...
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the other is sodium-depleting, which is a safer combination overall and has less side effects than some other diuretics. However, other diuretics may be prescribed for some patients as other existing health problems may play a role in what type of diuretic we recommend. We may suggest you work with your primary care physician in adjusting this medication for your needs.

3) Non-surgical Procedures:
Sometimes an injection of a steroid through the eardrum after it is numbed will temporarily settle down a period of increased Meniere’s activity. This can be done in our office by your ENT specialist.

Another type of injection performed in the office is called a Gentamicin injection (“gent injections”) which is used to chemically destroy the inner ear. Gentamicin is a strong antibiotic given through an IV that is used for patients who have life threatening infections. This antibiotic has a side effect known as ototoxicity (poisonous to the ear) but this side effect has been found to be helpful in Meniere’s patients when it is injected directly through the numbed eardrum and allowed to travel into the inner ear structures of the Meniere’s ear. Some patients require numerous gent injections over a period of many weeks or months and frequently a severe attack occurs as a result of the inner ear “dying off”, which is the intended goal of the treatment. The gent injections will not improve hearing, tinnitus or ear fullness and is intended only to control vertigo. Gent injections are not recommended for all Meniere’s patients and if it is recommended in your case you should discuss with your physician the pros and cons of this treatment.

What if I have Meniere’s in both ears?
There are varying opinions in regards to the percentage of patients who will develop Meniere’s in both ears. These opinions range that anywhere from 10 to 30% of Meniere’s patients will go on to develop bilateral Meniere’s syndrome. Our specialists keep those statistics in mind when recommending a treatment plan for you.

Will I feel better immediately after treatment?
It can take weeks or months to start feeling better after initiating a low sodium diet and a diuretic. Steroid injections usually provide faster relief but are only temporary. Gent injections are not effective immediately as it takes time for the inner ear to break down after being exposed to the Gentamicin. We tell patients who have had a gent injection to expect a severe spell 7-10 days after an injection, but many start to feel better after that initial severe spell passes. We will decide if you need any further gent injections based on your response to the first injection. If additional injections are required they may be spaced weeks or months apart based on your progress. Additional vestibular/balance testing may be performed during this treatment period in order to measure your inner ear response. After undergoing a shunt surgery, recovery time is variable but it may take up to a week before you start feeling better from a dizziness standpoint.

Important Contact Information

The Ohio State University
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  Dania Ahmed in Dr. Adunka’s office
- (614) 366-3687 Hospital Operator
  after hours, ask for ENT resident

Nationwide Children’s Hospital
- (614) 722-2000 Operator
  after hours questions, ask for ENT resident
- (614) 722-6547 ENT Nurse line
- (614) 722-4333 Emergency Department
  after hours emergency, only if no response from resident