OTITIS EXTERNA – SWIMMERS EAR

What is Otitis Externa?
Otitis Externa, also known as Swimmer’s Ear, is an infection in the external ear canal. These infections usually start quickly, within 48 hours. The symptoms often include pain and swelling in the front (tragus, and pinna) of the ear, drainage, a plugged feeling, itching, pain with jaw movement, neck pain/swelling, and surrounding skin infection (cellulitis). This infection can occur at any age.

What Causes Otitis Externa?
Normally, there is a protective, wax coating (cerumen) covering the ear canal. Wax prevents infection by being acidic and containing antibiotic enzymes. Otitis externa often results from a breakdown of this protective barrier and can be caused by a variety of factors that alter this barrier. Causes include: excessive wetness from swimming, showers, aggressive cleaning with Q tips, soapy deposits, alkaline eardrops or perspiration can cause a bacterial or fungal infection. Trauma from Q Tips can cause micro-breaks in the skin and lead to infection. Otitis externa is more common in warmer climates. Patients with diabetes are much more likely to get an otitis externa when their sugars are high. Some dermatologic conditions and allergies can predispose to infection as well. Over 98% of otitis externa is caused by bacteria (Pseudomonas most commonly), but fungus can cause the other 2%.

How is Otitis Externa Treated?
The main treatment for otitis externa is debriding the ear canal and topical ear drops (antibiotic, antifungal, or both). If the ear canal is too swollen to allow drops, than an otowick is often placed to stent the ear canal open so that drops can reach the entire length of the canal. If there is surrounding skin infection, the patient may be put on oral antibiotics along with drops. Because one of the most helpful treatments is debridement, you may need to see your physician every few days/weeks until the infection is gone.

What to do during your infection:
- Keep your ears dry at all times.
- When in the shower, put a cotton ball in your ear canal and then cover with Vaseline
- No swimming
- Call your doctor if your ear feels plugged or the pain/pressure is not improved after 3 days of treatment

What to do in the future to prevent otitis externa:
- Do not use Q tips and avoid other trauma to the ear canal
- Limit water accumulation and moisture in the ear
- Diabetics should work on controlling their blood sugar
- Routinely have your ear wax removed if it is a problem
- Use acidifying ear drops shortly before swimming or ear plugs during swimming.

Jeffrey S. Weingarten, M.D.  C. Bart Dickson, M.D.  Michael E. Stone, M.D.  Robert T. Standring, M.D.
TINNITUS

What is Tinnitus?
Tinnitus is the perception of sound without an external source. It is a symptom, not a disease. This sound can be perceived on either side, or one side of the head and can appear to come from within or outside the head. It is most often described as a ringing, buzzing, humming, roaring, or clicking sound. Tinnitus can be constant or intermittent. Transient perceived noise lasting just minutes is normal, and not tinnitus. More than 50 million people in the United States have reported experiencing tinnitus, leading to a prevalence of 10% to 15%. Around 1/5th of adults who have tinnitus will require clinical intervention. Tinnitus is relatively common, and the effects vary widely from patient to patient. If the symptoms last for greater than 6 months, it is persistent tinnitus. Bothersome tinnitus is defined as the problem significantly affecting your quality of life, preventing sleep, and disrupting your ability to perform general activities of daily living.

What Causes Tinnitus?
There is no identifiable cause for the majority of patients with tinnitus, although it is most commonly associated with hearing loss (primary tinnitus). In rare cases, tinnitus has an organic cause such as Eustachian tube dysfunction, otosclerosis, Meniere’s disease, auditory nerve abnormalities, vestibular schwannoma, or vascular anomalies (secondary tinnitus). Many drugs can cause tinnitus including Aminoglycosides (antibiotic), cisplatin (chemotherapy), or high doses of Aspirin. Tinnitus is often accompanied by symptoms of depression and anxiety. Loud noise exposure can cause tinnitus for a few hours to days, and this often resolves.

How is Tinnitus Treated?
Unfortunately, there is no cure for tinnitus. Despite there being no magic pill for this symptom, there are many therapeutic options that have been shown to help a significant amount of patients. If one therapy does not work for you, then move on to the next option and hopefully it will work for you.

For the patient in which tinnitus is bothersome, there are many options:
- Hearing aids: This has been proven to improve quality of life and limit the effects of tinnitus.
- Sound Therapy: machines that produce background sound (rain, wind…) or white noise (broadband). These are available at electronic stores, as apps on your Smartphone, or in your hearing aids.
- Cognitive Behavioral Therapy (CBT): mental health professionals provide this therapy which usually involve 8-24 sessions that last 60-120 minutes each. This therapy has improved quality of life scores.

For the patient in which tinnitus is NOT bothersome, there are many lifestyle changes and supplements that may be tried.
- Ginko biloba: This drug contains flavonoids and terpenoids, which act as antioxidants, free-radical scavengers, and have antiplatelet properties increase blood flow and decrease free radicals in the inner ear.
- Lipoflavonoids: The exact mechanism is unknown, but it is thought to increase the circulation of the inner ear.
- Zinc: this has been shown to improve the auditory nerve signal.
- Melatonin: This has been shown to help patients with tinnitus and insomnia.

Acupuncture, transcranial magnetic stimulation, anti-depressants, anticonvulsants, and anxiolytics have been proven to NOT have any benefit in patients with bothersome tinnitus.

Jeffrey S. Weingarten, M.D.  C. Bart Dickson, M.D.  Michael E. Stone, M.D.  Robert T. Standring, M.D.

Southfield  Novi  St. Clair Shores  Livonia
248-569-5985  ENTforYou.com
NOSEBLEEDS – EPISTAXIS

What Causes Nosebleeds?
Nosebleeds (epistaxis) have numerous causes. Nose picking is the most common cause of nosebleeds. Other causes include dry air, allergies, colds, high blood pressure, topical nasal medications, and surgery. There are many other rare, but serious causes. Most of the time, we don’t know the exact cause of the bleeding. We do know that nosebleeds are much more common in the winter when the air is dry. Nosebleeds are much harder to stop if patients are on blood thinners (Coumadin, aspirin, Heparin).

How are Nosebleeds Treated?
Holding pressure on the soft part of the nose for 10 minutes can control the majority of nosebleeds. Afrin is a nasal decongestant and should be the first line of therapy. If Afrin and holding pressure does not stop the bleeding, then call your ENT or go to the ER. Health professionals can use a variety of packing that will be used to exert pressure in the nose or contain anti-bleeding medication. If a Rapid Rhino balloon is used, these are typically removed after 3-5 days.

After Your Visit Care Instructions
1. Do not blow your nose for 7 days. Blow gently after that.
2. Sneeze with your mouth open.
3. Use a humidifier at night.
4. Use Ayr nasal gel or ocean nasal spray (2 sprays) to each nose at 10x daily. Both are over the counter (OTC)
5. Do not take additional aspirin, or NSAIDs (ibuprofen, Aleve, Motrin).

How can you care for yourself at home?
If you get another nosebleed:
1. Sit up and tilt your head slightly forward to keep blood from going down your throat.
2. Use 2 sprays of Afrin into each nostril
3. Use your thumb and index finger to pinch the soft part of your nose shut for 10 minutes - Use a clock. Do not peek before the 10 minutes are up. If the bleeding has not stopped, pinch your nose shut for another 10 minutes.
4. Try not to blow your nose for 3-7 days to keep it from bleeding again. Wipe gently

How can I avoid nosebleeds in the future?
- Avoid trauma (finger or other) to the nose
- Keep your blood pressure under control
- If you are on blood thinners, monitor your levels regularly

If the nosebleed does not stop after these techniques, go to the ER or call your physician.
MENIERE’S DISEASE

What is Meniere’s Disease?
This syndrome is fairly common and has been around for many years as Prosper Meniere first described it in the 1800’s. The American Academy of Otolaryngology (AAO) defines Meniere’s disease as a cluster of symptoms:
1) Vertigo – this is a spinning or whirling sensation that lasts 20 mins-24 hours (Avg. 1-3 hours). This is often accompanied by nausea and vomiting
2) Fluctuating hearing loss – this is usually low frequency, unilateral loss noted in a hearing test. Hearing loss progressively becomes permanent (over many months to years)
3) Tinnitus – this is often a unilateral roaring that may precede or come a the same time as the vertigo and hearing loss
4) Ear pressure or fullness – this is often present, but not needed for the diagnosis

What Causes Meniere’s Disease?
Meniere’s disease is thought to be due to an excess of fluid in a chamber of your inner ear due to inadequate absorption. It is also called Endolymphatic Hydrops. This buildup of fluid prevents the inner ear balance and hearing center from working correctly and the 3 major symptoms are the result. We don’t know why some people get this disease and others do not. People with Meniere’s disease have a weakened inner ear and are more sensitive to factors such as fatigue and stress that may influence the frequency of attacks.

How is Meniere’s Disease Diagnosed?
The diagnosis is often made bases on your clinical symptoms of vertigo attacks, tinnitus and fluctuating hearing loss demonstrated on a hearing test. In many cases, more information may be needed to confirm the diagnosis such as an ENG (electronystagmogram), ECoG (electrocochleography), ABR (auditory brainstem response), MRI, or CT scan.

What should I do during an attack of Meniere’s Disease?
Lie flat and still and focus on an unmoving object. Often people fall asleep while lying down and feel better when they awaken.

How can I reduce the frequency of Meniere’s Disease episodes?
Avoid stress and excess salt ingestion, caffeine, smoking, and alcohol. Get regular sleep and eat properly. Remain physically active, but avoid excessive fatigue. Consult your otolaryngologist about other treatment options.

How is Meniere’s Disease Treated?
Treatment for Meniere’s Disease is initially targeted at decreasing fluid in the inner ear, and later targeted at the balance organs. The initial treatment is lifestyle changes and diet control.
1) A low salt diet – under 1500mg per day. Measure your entire salt intake and consult a nutritionist if needed.
2) A diuretic (water pill): Dyazide – this type of diuretic decreases your potassium the least, but it is still good to eat a banana or take a multivitamin with potassium daily
3) Anti-vertigo medications: Valium – this should be taken to help quell severe vertigo attacks
4) Intratympanic (eardrum) dexamethasone injection– this can help acute attacks
5) Intratympanic gentamicin – this will help the vertigo attacks 80-90%, but there is a 30% risk of hearing loss
6) An air pressure pulse generator: Meniett device – pressure is pushed through a tube in your eardrum
7) Surgery – There are multiple options for surgery if the above fail to relieve your symptoms.
**REFLUX LARYNGITIS - LARYNGOPHARYNGEAL REFLUX**

**What is Laryngopharyngeal Reflux (LPR)?**
Changes in voice and hoarseness can be the result of a number of different causes. One of the more common causes is gastroesophageal reflux disease (GERD). GERD occurs when stomach acid regurgitates back up in the esophagus (swallowing tube). When the acid reaches the throat we refer to this as laryngopharyngeal reflux (LPR). This reflux can cause inflammation and swelling in the throat or in the larynx (voice box) and can result in a number of different symptoms. These include mild hoarseness which is typically worse in the morning, a sense of a foreign body or lump in the throat, a sense of mucous sticking, a need to frequently clear the throat, chronic cough, a sticking sensation when swallowing, bad breath and a chronic low grade sore throat. Oftentimes, LPR irritation in the throat and larynx is mistaken for sinus drainage or “post nasal drip” because of the sensation of mucous. LPR tends to become more prominent as people age, is often related to the timing and type of the diet, obesity and hiatal hernia (stomach pushing up through diaphragm into chest cavity) make it worse.

**50% of people with significant LPR have no symptoms of heartburn, acid indigestion or stomach upset.**

**How is LPR Diagnosed?**
The diagnosis of LPR is based on clinical symptoms and physical finding of inflammation in the throat in locations consistent with LPR (back part of the voice box). Often the patient is treated for LPR without any further testing. More significant testing is usually not needed. However, on some occasions, some additional tests may be required such as a swallowing study with barium, an endoscopic evaluation of the esophagus and stomach, or a probe that measures acidity (pH) in the throat and esophagus.

**How is LPR Treated?**
The most important treatment of LPR is dietary control. The most important factors include not eating within 3-4 hours of bedtime, eating a blander diet, smaller but more frequent meals, avoidance of alcohol, and tobacco and caffeine. Avoidance of acidic, fatty foods, mint, gum chewing and candies are also important. Elevation of the head of the bed and avoidance of tight, binding clothing can help as well. A person with reflux who is overweight should reduce weight, and reducing stress also frequently improves the symptoms.

**Initial medical treatment is typically a proton pump inhibitors (PPI) such as Prilosec (omeprazole), Protonix (pantoprazole) or Nexium (esomeprazole). These are sometimes combined with other stomach acid reducers such as Zantac (ranitidine) or Pepcid (famotidine), but these can be used on their own as well. These are currently available over the counter. If you are using antacids such as Tums, Maalox, or Mylanta, tell your physician as consistent use of these do not help the root problem of reflux. Consistent use of the prescribed medication for at least 2 months while observing dietary control is critical. You may not notice any difference in your symptoms for 6-12 weeks. Humidification, hydration, mucous thinners and avoidance of throat clearing are all of value for those people who have significant throat symptoms. Make sure that you take your PPI 30 minutes before a meal, this allows it time to work.**

Untreated LPR can lead to chronic swelling of the vocal folds, ulcerations of the vocal folds and formation of masses known as granulomas. LPR can also make asthma worse.

**Things That Make Reflux Worse:**
- Eating within 3-4 hours of going to sleep
- Exercising directly after eating
- Spicy and acidic (tomatoes, citrus, juices)
- Chocolate and mint
- Eating too much in one sitting

Jeffrey S. Weingarten, M.D. C. Bart Dickson, M.D. Michael E. Stone, M.D. Robert T. Standring, M.D.

Southfield Novi St. Clair Shores Livonia

248-569-5985 ENTforYou.com
NON-SURGICAL THERAPIES FOR FACIAL MUSCLE MAINTENANCE AND REHABILITATION

When the facial nerve has been damaged, stretched by tumor growth or surgery, or affected by Bell’s palsy a temporary or possibly a permanent weakness may result. Sometimes the nerve may partially regenerate. Several self-administered therapies could help to preserve muscle bulk while awaiting nerve regrowth.

**Exercises**

Use a hand mirror regularly to check the position of the facial muscles during laughing, tense situations, and on waking will help you to be aware of the weak muscles. The muscles on the uninvolved side are controllable; the object is to keep them as relaxed as possible.

**Exercises** - Use a mirror to examine your face while you (perform these 3 times daily)

<table>
<thead>
<tr>
<th>Wrinkle forehead</th>
<th>Open eyes wide</th>
<th>Open mouth, evenly drop jaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise eyebrows</td>
<td>Squint eyes</td>
<td>Curl bottom lip</td>
</tr>
<tr>
<td>Scowl, draw eyebrows together</td>
<td>Balloon cheeks - slowly</td>
<td>Exaggerate a smile</td>
</tr>
<tr>
<td>Wrinkle nose</td>
<td>Hallow cheeks</td>
<td>Show teeth</td>
</tr>
<tr>
<td>Close eyes tightly</td>
<td>Pucker lips and whistle</td>
<td>Curl upper lip in sneer</td>
</tr>
</tbody>
</table>

**Heat:** Use mild heat- warm towels, a heating pad, or hot water bottle- to stimulate blood supply to the facial muscles 2-3 times daily. Also, gently massage the muscles on the affected side.

The weakness on the affected side may take weeks to months to recover (even up to 12 months). If there is no recovery in muscle movement after 6-12 months, call your doctor for another evaluation. There are many surgical techniques that can be performed that help to achieve symmetry of the face.
EUSTACHIAN TUBE DYSFUNCTION
SPECIAL INSTRUCTION FOR FLYING AND SCUBA DIVING

What is Eustachian Tube Dysfunction (ETD)?
The Eustachian tube is a canal that connects the middle ear space to the back of the nose. Problems arise when it does not open and close well. Symptoms of ETD include a feeling of pressure or fullness in the ear, ear pain, hearing loss, ringing in the ear, dizziness and possibly and echoing sound when you talk.

What causes ETD?
ETD is much more common in children due to the flat angle and narrowness of the tube (see picture below). Causes of blockage and poor function of the ET include poor squeezing function, blocking of the ET from a big adenoid pad or mass, nasal infection or secretions, and middle ear disease. Risk factors for ETD are colds, allergies, rapid changes in pressure, and sudden weight loss.

How is ETD treated?
SEE YOUR ENT PHYSICIAN TO MAKE SURE THERE IS NO INFECTION, MASS, OR TUMOR CAUSING YOUR SYMPTOMS.
The treatment for ETD is aimed at opening up the eustachian tube in the back of the nose. The main treatment is using a steroid nasal spray to help shrink the tissue where the ear drains.
- Nasal steroid (Flonase, Nasonex, Nasacort) – 2 sprays into each nostril twice daily. This may take a few weeks to show any effect
- Neil Med Sinus rinses – 3-5x daily into each nostril
- Try to pop your ears 5-10x daily (this is called auto-insufflation). To do this, hold your nose and pinch the nostrils closed and blow against your fingers and closed nostrils to force the air up into your ears. This will allow you to equalize the pressure as the plane descends or as you dive underwater.

If you have trouble Flying or Scuba Diving:
You may have problems with the decent in the plane or in the water. If so, try the following preventative measures:
- Afrin nasal spray – 2 sprays into each nostril 30 minutes prior to flying/diving and 1 hour before the plane lands. Do not take this for more than 3 days.
- Sudafed 30 milligrams one hour before the plane lands
- If flying and diving is a chronic problem, start a nasal steroid (Flonase, Nasonex, Nasacort) for 2 weeks prior to your trip/dive.
- Pop your ears early and often.
  o For flying, try to pop your ears as the plane descends.
  o For diving pop your ears on the surface and essentially with every breath-do not descend head first as you increase the gravitational effects/congestive effects while diving).

FOLLOW UP WITH YOU ENT PRIOR TO ANY TRIPS OR DIVES IF YOU HAVE ANY QUESTIONS.

Jeffrey S. Weingarten, M.D.  C. Bart Dickson, M.D.  Michael E. Stone, M.D.  Robert T. Standring, M.D.
Southfield  Novi  St. Clair Shores  Livonia
248-569-5985  ENTforYou.com
EARWAX - CERUMEN

What is it?
Earwax (cerumen) is produced by follicles and glands that line the ear canal. This yellow brown waxy oil material protects the ear by trapping dust, debris, bacteria, and foreign particles; preventing them from damaging the eardrum. The earwax is normal and is made of chemicals, which both moisten the ear canal and kill germs.

Why is Earwax a problem?
Earwax becomes a problem when it blocks the ear opening and causes a hearing loss. For some people, the ear canal produces more wax or thicker wax than the ear can naturally secrete. The aging process seems to thicken the earwax. Earwax blockage can cause hearing loss (temporary), noises in the ear (ringing or tinnitus), ear pain or a fullness or pressure sensation in the ear. Any wax buildup in the ear canal can predispose the canal to become infected. Patients that wear hearing aids often have more earwax impaction.

Q-tips, bobby pins, keys or other instruments should never be placed in the ear. They can worsen the problem by pushing the wax further into the ear canal and even push it against the eardrum. They can also cause damage to the ear canal or put a hole in the eardrum. This can damage the bones of your ear or the inner ear itself resulting in permanent deafness, dizziness and ringing.

How is Earwax treated?
In many cases earwax blockage can be treated at home. Using ear drops (mineral oil/sweet oil/olive oil) can help to soften the wax and allow it to come out on its own. Over-the-counter products such as Debrox, Murine Eardrops or diluted hydrogen peroxide can be used as well, but they are chemicals, which must be thoroughly removed from the canal to prevent potential ear canal damage. If used repeatedly, these solutions may cause irritation of the ear canal skin. Home remedies such as “candling” maybe dangerous and cause damage to the ear drum. Never place any non-prescribed eardrops into the ear if there’s a hole in the eardrum. If in doubt, you must have an examination by your physician first.

When is an office visit necessary?
Call your physician when you are having symptoms and the above methods do not work or new symptoms such as drainage, ear pain, fever or persistent hearing loss occur. Your physician has the benefit of directly visualizing the ear canal and removing wax in a safe and gentle manner. To clean the ear canal, your physician may use a variety of instruments including suctioning, curettes, and irrigation.

Prevention:
Use mineral oil/sweet oil/olive oil – While lying on your left side, place 4 drops into the right ear, wait 5 minutes, sit up and wipe off the excess. Do the same for the left ear. Perform this once a day for 7 straight days. Perform this week of drops every other month (every 8 weeks).

- If your attempts at home are unsuccessful, call your physician for an appointment
- Do not use the oil if there’s a hole in the eardrum.
CAWTHORNE HEAD EXERCISES FOR VESTIBULAR WEAKNESS

What is Vestibular Weakness?
Uncompensated vestibulopathy is an “inner ear” abnormality that can be caused by a variety of ear disorders. The exercises described below have been shown to greatly reduce or completely eliminate symptoms relating to inner ear problems from a variety of causes. Provided that your disorder is not chronic, beneficial effects of the exercises will be apparent within a few weeks. Usually 6 months or less is adequate for correcting most problems. Just waiting for your balance to improve is not generally an effective approach. Once the inner ear has been damaged, the effects on balance sometimes never self-correct without such exercises. These exercises are affective because they “retrain” your brain to recognize as “normal” some of the abnormal signals coming from your inner ear due to a past or present inner ear disorder.

How is Vestibular Weakness Treated?
These exercises will help your brain compensate for your vestibular weakness. They should be performed for 15 minutes twice a day increasing to 30 minutes.

1. Eye exercises: Look up, then down, at first slow then quick (20 times). Look from one side to the other, at first slowly then quickly (20 times). Focus on one finger holding your hand at arms length, look at nose, then move it back again (20 times).
2. Head exercises: Bend your head forward then backward slowly with your eyes open, then quickly (20 times). Turn your head from side to side, slowly, then quickly (20 times). As dizziness improves, these head exercises should be done with eyes closed.
3. Sitting While sitting shrug your shoulders (20 times). Turn shoulders to the right then left (20 times). Bend forward and pick up objects from the ground and sit up (20 times).
4. Standing: Change from sitting to standing and back again (20 times with eyes open, 20 times with eyes closed). Throw a small rubber ball from hand to hand above eye level. Throw ball from hand to hand under one knee.
5. Moving about: Walk across a room with eyes open, then closed (10 times). Walk up and down a slope with eyes open, then closed (10 times). Walk up and down steps with eyes open, then closed (10 times). Any game involving stooping or turning is good.

Results should begin to be apparent within about 6 weeks, but it usually takes 2-3 months or more for the exercises to be completely effective. In the beginning, you may experience more dizziness than you normally do. However, this should improve in a few days. Any severe dizziness or other disturbing sensations should be reported to your referring physician. If the exercises are not effective, this should also be reported to your physician.

Jeffrey S. Weingarten, M.D.  C. Bart Dickson, M.D.  Michael E. Stone, M.D.  Robert T. Standring, M.D.
Southfield   Novi   St. Clair Shores   Livonia
248-569-5985   ENTforYou.com
What is BPPV?
Benign Paroxysmal Positional Vertigo (BPPV) is the most common type of vertigo. Although bothersome, this condition is not a serious health risk. It is benign because it is not caused by a disease or malignancy, paroxysmal because the attacks are sudden and short in duration, positional because the attacks are brought on by changes in head/body position, and vertigo is the sensation of external motion (i.e., the room spinning). BPPV can occur at any age, but it is more common after the age of 55 and occurs in women more often than men. There are many causes of BPPV including head trauma and viral trauma, but most of the time, there is no precipitating event or discernable cause.

What Causes BPPV?
BPPV is thought to be caused by canalithiasis, which is the accumulation of calcium deposits in the canals of the inner ear. These deposits are not due to abnormal build up from diet or supplements, but instead are a vital part of the gravity sensor of the inner ear. With BPPV, these deposits become pathologically displaced and migrate into the semicircular canals (organs that sense head rotation and coordinate head and eye movements). This causes Vertigo.

What are the Symptoms of BPPV?
Persons with BPPV will experience episodes of vertigo that last between 5-30 minutes in response to certain head movements. These movements include tilting the head to one side or the other or bending over, lying down to one side or the other, or turning over in bed. The vertigo is a sudden, severe spinning sensation that may be accompanied by nausea, lightheadedness, and loss of balance. The actual spinning may last for less than 1 minute and symptoms may last for hours after the attack.

How is BPPV Diagnosed?
This is diagnosed during your clinic appointment based on your history and a characteristic nystagmus (involuntary eye movements) during the Dix-Hallpike maneuver (lying down with head turned to one side).

How is BPPV Treated?
The canalith repositioning procedure (Epley) is performed to move the calcium deposits out of the semicircular canals into an area that will not cause vertigo. This procedure works 80-90% of the time, but in some cases, you may need it performed more than once. In rare cases, this may require surgery, which involves plugging the semicircular canal.

After Treatment in the office:
1) Sleep upright (between 90 and 45 degrees) with head facing forward for 48 hours
2) After the first 48 hours, sleep on your back and DO NOT TURN TO THE AFFECTED SIDE for 2 weeks
3) Wear a soft collar if instructed by your doctor
4) Start the Brandt-Daroff exercises if these symptoms return or have not revolved after 10 days
5) If these exercises do not help, then call the office for an appointment (248) 569-5985

Brandt-Daroff Exercises:
1) Sit on edge of bed and turn head 45 degrees to the right
2) Lay down on right side with head turned, wait 30 secs
3) Sit up, wait 30 secs (dizziness is normal)
4) Turn head 45 degrees to the left and lay down

Do these exercises 3 times daily for 2 weeks.
Morning – 5 repetitions (10 min)
Afternoon – 5 repetitions (10 min)
Nighttime - 5 repetitions (10 min)