Meniere’s Disease(an Ear Disease) Essay, Research Paper

Meniere’s disease is disease of the ear. There are two types of Meniere’s, classical Meniere’s affects both the hearing and balance systems and there’s also Meniere’s that affects only the Cochlea, which is the hearing organ and only the Vestibular system of balance.

In the early stages of this disease many people experience sudden attacks of dizziness, nausea, ear ringing or tinnitus, and ear or head pressure. There may also be fluctuating or permanent, hearing loss. The dizziness they experience may take the form of vertigo or a feeling of lightheadedness, or an “about to faint” feeling. There may be a sudden loss of balance, sometimes referred to as a “drop attack”. However, the Meniere’s patient never actually passes out in most cases. These attacks may come and go, like they have a mind of their own. They may also accompany or trigger an anxiety attack. This may result in a variety of symptoms. There does seem to be common symptoms, with Meniere’s. But not everyone will have all of the symptoms. Also, the duration and severity of the attacks will vary greatly from one patient to another. There may be remission periods of no symptoms. Periods of remission have been known to last for hours, or even many years.

In about 75 percent of Meniere’s patients it only affects one ear. There is no real known cause for Meniere’s. There are many theories, though. At least 10 percent of the time, it is an autoimmune response. The body’s own immune system attacks the inner ear. Medical science does know that too much pressure causes the attacks in the inner ear systems. There may be several reasons for this such as too much fluid produced in the ear, spasms within the inner ear structure, a hypovascularity or a temporary reduction of fluid flow in the ear, malfunction of the fluid sac this sac regulates the fluid pressure it also absorbs and reabsorbs fluid or unknown which is idiopathic. All of these reasons may have a number of different causes. So you see why it is so difficult for your doctor to know what’s going on.

Diagnosis is also very difficult. If Meniere’s is suspected, one should see a specialist who is an otologist, or at least an ear, nose, throat doctor or an ENT. Much testing may be necessary, because dizziness may be a sign of a more serious condition. Cardiovascular disorders and tumors must be ruled out. Also blood tests for other disorders, like blood sugar problems, thyroid, etc., should be done. After other possible causes are ruled out, there are tests that may show the possibility of Meniere’s. A MRI or C-T Scan lets a doctor know that there are no tumors or Central Nervous System problems, by looking at your brain and surrounding area. A possible Meniere’s disease patient may be sent to a neurologist for a complete “brain” examination. This is a normal procedure and does not mean anything is wrong. An ENG or Electronystagram is used to assess the balance system function. A patient may be asked to look at a series of things, including lights. Cool and warm water is inserted into each ear to over-stimulate the balance system causing vertigo. The patient’s reaction time to the vertigo is then measured. Many people do not like this test, but it is a very good way to assess balance system function. There is also a platform balance test in which the patient is strapped into a harness, and the floor and background are moved. A computer analyzes your balance function and reaction to the changes. The rotation chair test is a test where the patient is put in a round room in a special chair. They may be asked to look at a light, while in the dark. The chair is rotated and the patient’s reaction is measured. There’s also an ECOG, which is short for electrocochleaography. This test checks for excess pressure within the cochlea. The patient lies on a table; an electrode is hooked to the eardrum. The patient then listens to a series of clicking noise. It is relatively painless. There also simple hearing tests since hearing loss is very common with Meniere’s, this may be a good way to diagnose, especially if hearing is lost in the affected ear.

There are a variety of treatments for Meniere’s. Some work for some people, but none work for all people. Some treatments are lifestyle changes such as a reduction in salt and caffeine intake, stop smoking, avoiding any foods that may trigger symptoms, eating a well balanced diet, exercising, avoiding stress, and resting properly. There is also medicines such as diuretics or water pill to help reduce fluid build up, dyazide is a common drug used, benzodiazepenes such as Valium, Klonopin, Ativan, Xanax, Tranxene, etc. Used as a Central Nervous System sedative to help dizziness symptoms. A relatively low dose is all that is needed for them to be effective. One must be careful about developing a drug tolerance and dependency, if taking moderate or high doses. Allergy treatments have helped some people, possibly due to an allergy response. Antihistamines, allergy testing and treatments like injections) may help some people, anti-dizziness medications like Antivert Meclizine and Dramamine, seem to help most with nausea, rather than dizziness. They seem to be more effective for seasickness, as is the Scopolamine patch which worn behind the ear. However, some people are helped substantially, depending on the case. Vasodilators, which are drugs that relax or dilate, blood vessels. It is thought that increasing blood flow to the inner ear may help certain individuals. Drugs like Ethatab, Pavabid, niacin, Gingko would fall in this category. SERC or Betahistine is a drug that is supposed to increase inner ear circulation, by means of a histamine action. Results vary. The FDA does not approve SERC for use in the US, after many years of use in other countries. Vertigoheel or Cocculus Compositum, this medication is supposed to help dizziness and related symptoms by stimulating the Central Nervous System. Poison hemlock is one of the ingredients. Immune system suppressants also help if the problem is an autoimmune response, many people are helped with oral steroids or Prednisone, or injections directly into the middle ear, soaking into the inner ear most commonly Dexamethasone. Antiemetics are drugs specifically for nausea, associated with dizziness. There are also Antidepressants, Elavil, Prozac, Zoloft, antidepressants may help the patient cope, and in some cases help the vertigo symptoms.

There are also surgeries such as the Shunt surgery. The shunt surgery is done to decompress the fluid system. This helps to release the excess pressure or fluid within the system. Most shunts last from 2 to 4 years. There may be exceptions. It is believed that the body’s ability to heal itself eventually causes the shunts to fail. In most shunt surgeries, a mastoidectomy is done. This is an incision behind the ear, through the mastoid bone. The fluid system is then punctured and a tube is usually inserted. In some cases the tube may run into the subarachanoid or spinal area. It is also believed that most shunt surgeries are done to relieve dizziness, and prevent further damage to the inner ear systems, without any destructive procedures. There is also a Vestibular Nerve Section. During this surgery, the balance nerve is severed from the brain. This eliminates dizziness and balance function in the affected ear. If the other ear is good, then within a few weeks, its balance system will eventually take over balance. This operation is a cure, if the other ear is good. It also preserves hearing. Like all operations there are risks. This operation is classified as brain surgery. There is a Labrynthectomy, which is basically, removing the inner ear. Since it also destroys hearing, it is only done when there is little or no hearing left in the affected ear. This operation is also a cure, provided the other side is not affected. Eventually the balance system from the other side is supposed to take over balance.

Some non-surgical treatments are Gentamicin a strong antibiotic that is toxic to the balance system is injected into the ear, through the eardrum. Most times it is a series of injections. Results vary with this procedure. The desired effect is to disable the balance system on one side, without surgery. There is also DMZ or Dexamethasone, a steroid, is injected into the ear. This procedure is for people with an autoimmune response. The desired effect is to suppress the immune system, from attacking the inner ear. As with all Meniere’s treatments, results vary.

There are also therapies. Physical Therapy helps some people to cope and live with a not so perfect balance system. There’s the Eply maneuver this therapy seems to work better with BPPV or benign positional proximity vertigo. That is dizziness without actual Meniere’s disease. The head and neck are manipulated, in certain positions. Chiropractic, acupuncture, homeopathic – Results with these things varies also. It really depends on the patient and situation. There’s psychological therapy which some people find they need additional counseling to cope with Meniere’s and it’s problems. In some cases, a psychologist or psychiatrist is recommended. There are support groups in which many people find comfort talking to and relating to people with the same problems. In many cases, the patients’ friends, co-workers, and even family, may not believe that there is anything wrong with them. Support groups may be actual meetings or Internet.

Prognosis for Meniere’s is very difficult to predict, because it can affect people so differently. There is the possibility of being disabled, due to balance system damage. Deafness is also a real possibility. Certain procedures can be a cure, under the right conditions. It is also possible, that a person can live with Meniere’s and still function normally. The symptoms can be very frightful. Seeing a specialist and knowing about the condition is very important in learning to deal with it. It is also very helpful to talk to people that know what you are going through.

Meniere’s in itself is not a fatal condition. Things could be much much worse. Knowing this and understanding limitations may go a long ways in coping, and living a happy and productive life.