

Sudden Sensorineural Hearing Loss

Sudden sensorineural hearing loss (SSNHL) is caused by damage to nerves in the inner ear. The hearing loss occurs very quickly and can happen all at once or over a period of three days. It can be

What are common causes of SSNHL?

Infection: Viral, Meningitis, Lyme disease, Syphilis

Vascular: Blood flow blockage to the inner ear:

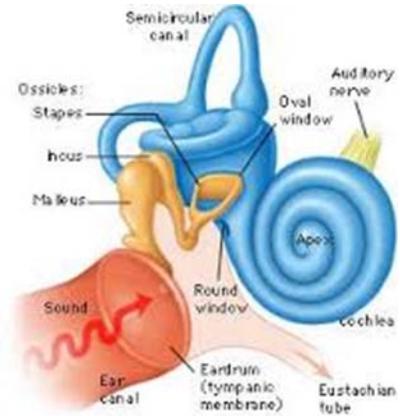
Blood clotting disorders, Post Radiation therapy

Autoimmune disease/Inflammation

Trauma/Tumors: Vestibular schwannoma (Benign brain lesion)

Toxins: Antibiotics (Gentamycin), Chemotherapy (Cisplatin)

Idiopathic: Unknown cause



How is SSNHL diagnosed?

A hearing test called an audiogram is needed to measure your hearing and find out if your hearing loss involves the hearing nerves in your inner ear.

If SSNHL is confirmed, your doctor will order an MRI to evaluate your brain and inner ear. Your Doctor may also order some routine blood tests to look for the reason for the sudden hearing loss.

How is SSNHL treated?

There are limited options for treatment of SSNHL and treatment should be started as soon as possible, preferably within 72 hours of the onset of your hearing loss. Because hearing loss can be a devastating problem for you and can interfere with your ability to communicate, we take this very seriously and work very hard to offer you the medical therapies available in the hopes that treatment may restore some of your hearing. You must understand, however, that even with medical management that approximately 20-30% of patients will not respond to therapy. Some patients will have full recovery, some partial recovery and others with no improvement despite our efforts.

A sudden return of hearing (either complete or partial) can commonly occur without treatment, but it is not known who will have spontaneous recovery and therefore it is usually recommended that some form of treatment be initiated right away even though you may have spontaneous recovery without therapy.

The main therapy is HIGH DOSE ORAL steroids for 14 days with a slow taper of the steroids over several weeks. You may have periodic repeat hearing tests over the course of treatment.

Prior to beginning high dose oral steroids, you should understand that there are risks associated with this medical care. Common risks/side effects include: insomnia, dizziness, weight gain, increased appetite, increased sweating, gastritis/reflux, mood changes, light sensitivity, high blood sugar, and failure to improve/respond.

TREATMENT:

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Most people have increased problems with heartburn and reflux and will be prescribed Zantac to reduce this side effect of oral steroids.

SEVERE BUT RARE side effects include pancreatitis, gastro-intestinal bleeding, hypertension/high blood pressure, cataracts, muscle pains and weakness, opportunistic infections, fractures, avascular necrosis of the hip and shoulder joints, psychosis (hallucinations), and diabetic coma.

If you are diabetic or borderline diabetic, you will need close monitoring of your blood sugars and you may even need to go on insulin during your therapy. We will need to arrange follow-up with your primary care doctor to ensure appropriate monitoring of your blood sugars.

If you have a seizure disorder, steroids can lower the threshold for seizure activity. You will need to have clearance from your neurologist prior to taking steroids.

Increased thirst, frequent drinking, frequent urination, blurred vision and confusion are all signs of increased blood sugar levels and would require that your blood sugars be tested. Blood sugar levels can rise to the point where you can go into a diabetic coma.

If you begin to have hip or shoulder pains you will need to alert us immediately so that we can determine if you are having a rare but serious problem called avascular necrosis.

If you begin to have hallucinations, problems thinking or confusion you could be experiencing a steroid induced psychosis. You will need to alert us immediately so that we can taper you safely off of the medications.

If you suddenly stop your steroids in mid-therapy, you are at risk for a condition called adrenal insufficiency. This is where your own body's source of steroids is no longer produced and puts you at risk for weakness, low blood pressure, low blood sugar, cardiac collapse and coma.

ALTERNATIVE TREATMENT:

Some patients are good candidates for combined oral steroids and trans-tympanic steroid injections and will be offered this therapy. In other patients with diabetes or in the very elderly the first line therapy may be trans-tympanic steroid injections alone. Also in some patients who do not respond to high dose oral steroids after a period of time, depending on the pattern of hearing loss, they may or may not be candidates for trans-tympanic injections. These decisions are made on a case by case individual basis. Other less commonly used therapies for non-responders include hyperbaric oxygen therapy.

With trans-tympanic steroid therapy, the steroid is injected through a pinpoint opening made in your ear drum to allow access of the steroid to the inner ear.

By signing below, I indicate that I have read and understand the above information related to the risks, benefits, and alternatives to the therapy offered to me for the treatment of sudden sensory neural hearing loss. I have had all of my questions answered.

Patient Signature

Date