

Your doctor has diagnosed you with Superior Canal Dehiscence Syndrome (SCDS), a medical condition of the inner ear, first described in 1998 by Dr. Lloyd B. Minor of Johns Hopkins University. The symptoms are caused by a thinning or complete absence of the part of the temporal bone overlying the superior semicircular canal of the vestibular (balance) system. This condition may result from slow erosion of the bone or physical trauma to the skull, and there is evidence that the defect or susceptibility to developing this condition is congenital (born with it).

Symptoms

Dizziness and hearing loss can occur in SCDS. Vertigo and oscillopsia (the apparent motion of objects that are known to be stationary) are evoked by loud noises and/or by maneuvers that change middle-ear or intracranial pressure (such as coughing, sneezing, or straining). Those with SCDS may experience a feeling of constant disequilibrium and imbalance, and may perceive that objects are moving in time with their pulse (pulsatile oscillopsia). Auditory symptoms of SCDS may include autophony (increased perceived loudness of one's own voice) or hearing your own eyes moving.

Diagnosis

The Vestibular Evoked Myogenic Potential (VEMP) test is one of the most sensitive vestibular tests for SCDS. It involves recording muscle activity from the large muscles along the side of the neck while listening to low-pitched pulsing sounds. The test is fast and painless. If an abnormal VEMP is obtained, the presence of dehiscence can then be confirmed by a CT scan of the temporal bone, currently the most reliable way to distinguish between superior canal dehiscence syndrome (SCDS) and other conditions of the inner ear with similar symptoms. An audiogram or hearing test will also reveal a low frequency conductive hearing loss in the affected ear(s).

Treatment

For many patients, avoidance of provocative stimuli such as loud noises may be sufficient treatment. For those patients who are significantly affected by their symptoms, surgical plugging of the superior canal can be very beneficial in alleviating or substantially reducing symptoms.