


Diabetes and Hearing Loss




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Chronic Disease with Secondary Hearing Loss

- A. Diabetes
- B. Thyroid disease (hypothyroidism)
- C. Multiple sclerosis
- D. Chronic Renal Disease
- E. Cardiovascular Disease
- F. Alport's Syndrome
- G. Paget's Disease
- H. Cogan's Syndrome
- I. Dementia

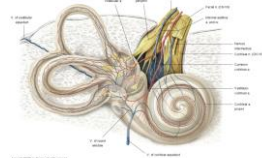
Diabetic Eye Disease



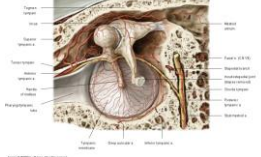
Diabetic eye disease refers to a group of eye problems that can occur as a result of diabetes. Without diagnosis and treatment, diabetic eye disease can

VASCULATURE OF THE EAR

Blood Vessels of the Inner Ear



Arteries of the Middle Ear



Comorbidity of Diabetes and other Health Issues

- Heart Problems
- Balance Issues
- Vision Impairment
- Hearing Loss
- Neuropathy/Pain Management

Medicines and Hearing Loss

PAIN MANAGEMENT
 INFECTION CONTROL
 HORMONE REPLACEMENT
 FLUID RETENTION
 CANCER CHEMOTHERAPY

WHO IS CHECKING YOUR HEARING WHEN YOU USE THESE MEDICINES?

Ototoxic Drugs

- A. Aminoglycoside Antibiotics (mycin drugs)
- B. Loop Inhibiting Diuretics (lasix, furosemide)
- C. Salicylates (aspirin, darvon, darvocet)
- D. Cancer Chemotherapy
- E. Hormone Replacement treatment
- F. Quinine

Diabetes and hearing loss

- In people age 60 and older with type 2 diabetes:
 - High blood sugar causes tiny blood vessels in the inner ear to break, disrupting sound reception
 - Associated balance problems may come from neuropathy
 - Mechanisms related to neuropathic or microvascular factors, inflammation, or hyperglycemia may be mediating the association of diabetes and hearing impairment (Bainbridge et al, 2010)

Effects of Untreated Hearing Loss

- Embarrassment, fatigue, irritability
- Tension/stress
- Avoidance of social activities
- Withdrawal from personal relationships
- Depression, negativism
- Danger to personal safety
- Social rejection by others
- Impaired memory and ability to learn new tasks
- Poor job performance and reduced earning power
- Diminished psychological and overall health
- Dementia
- Falls risk

(Better Hearing Institute, 2009)

Auditory Deprivation

- Although we hear with our ears, it is the brain that is the true hearing organ
- Over time, the brain's ability to understand speech is often affected by hearing loss
- Once the ability to understand is lost, that ability can be difficult, if not impossible, to regain
- Wearing hearing instruments can assist the brain in keeping the ability to understand from being lost

The stages on losing hearing

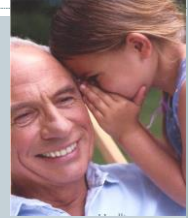


Recommendations for Monitoring Hearing

- Get a baseline hearing test by age 55
- Ongoing assessment of hearing levels at least every 2 years
- Test hearing once a year with diabetes
- Use hearing aids if recommended
- Seek an audiologist for comprehensive hearing services and monitoring

Improved Hearing Means:

- **Better family relationships and communication**
 - Less isolation and less prone to depression
- **Better job performance**
 - Can follow conversations easier and can make more money
- **Better quality of life**
 - Involvement in church, family and group activities
- **More energy/less stress**



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