



Case presentation

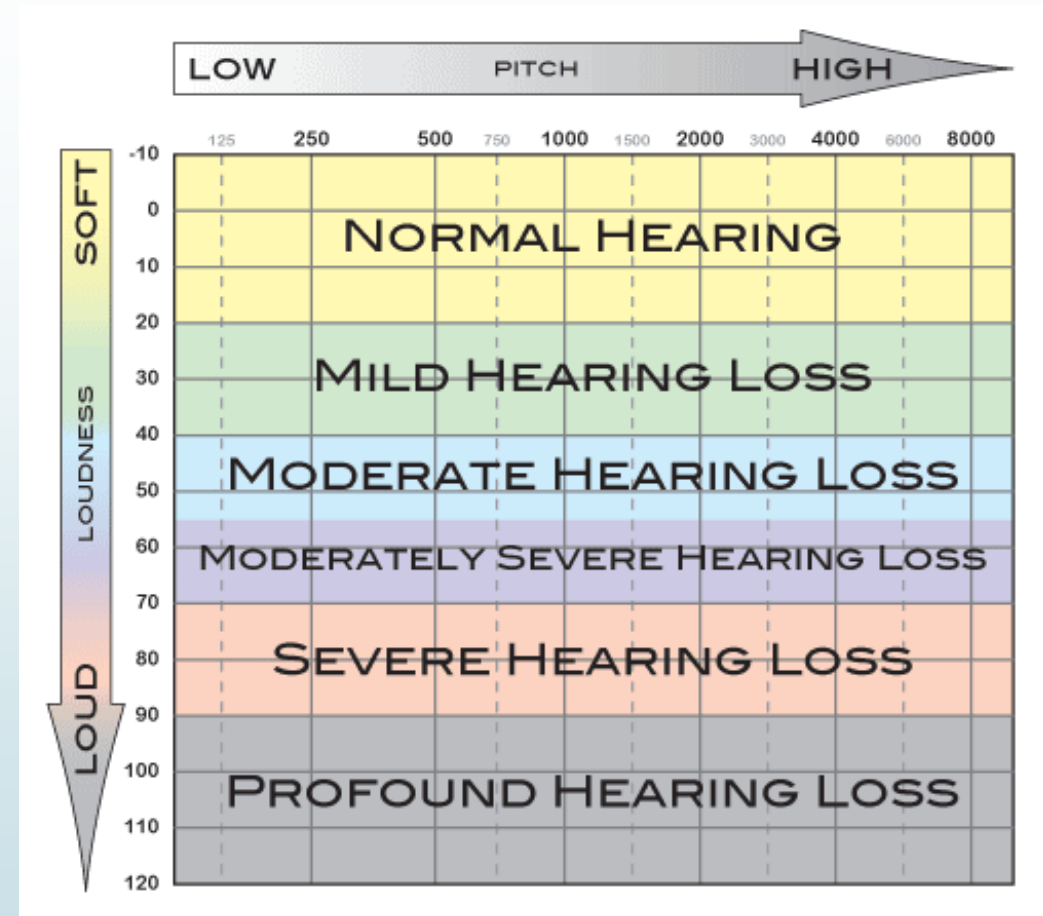
Barbara Bozzai



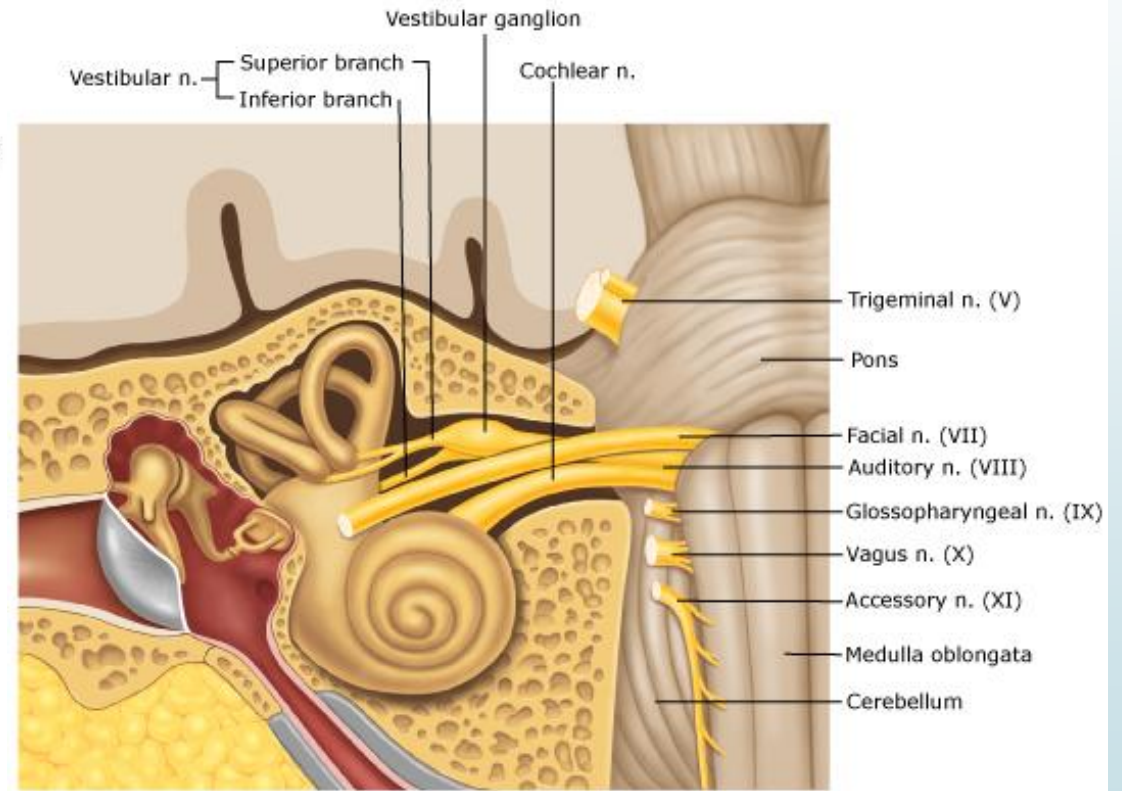
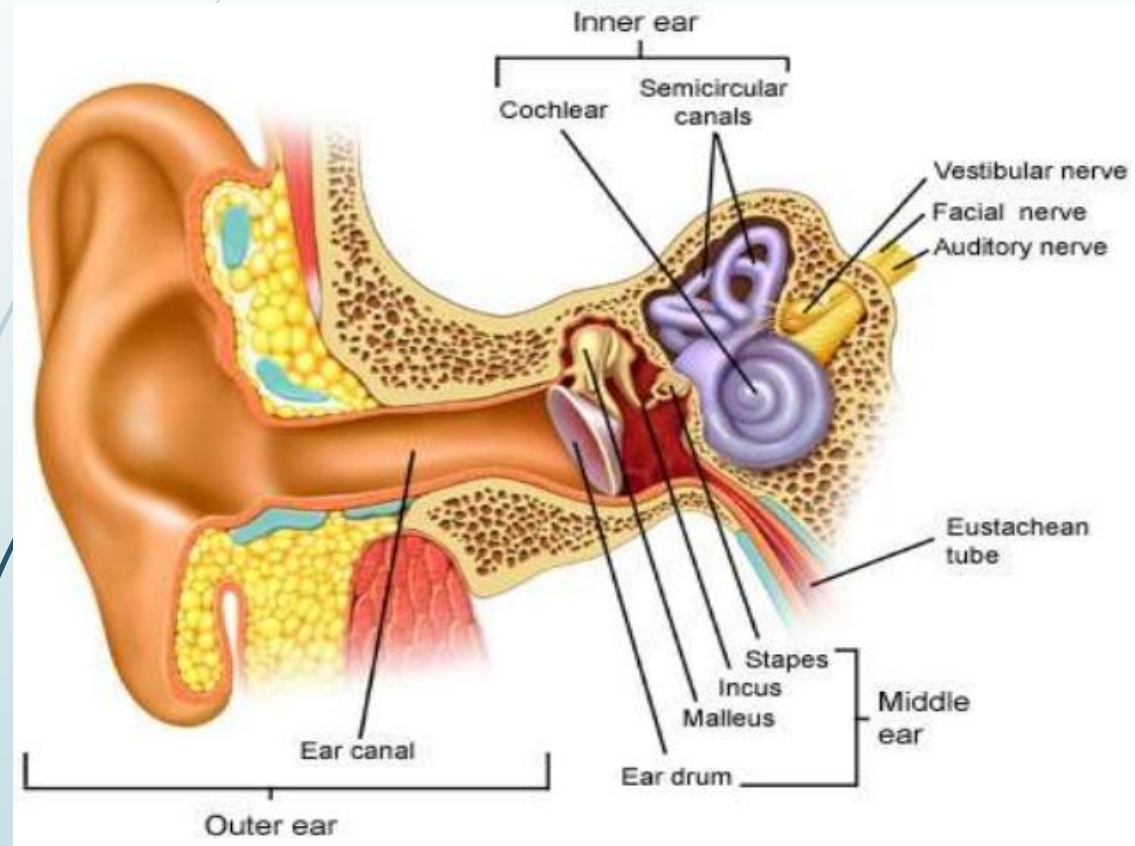
L.M.

- ▶ 12 years old boy
- ▶ History:
 - ▶ Hospitalization because of laryngitis subglottica
 - ▶ In the last year he had more times upper respiratory tract infection
- ▶ Family history: negative
- ▶ Current symptoms:
 - ▶ 01-09.05.2016. – tonsillitis, therapy: azithromycin, later penicillin
 - ▶ At the end of the therapy dizziness and tinnitus
 - ▶ 12.05. – because of dizziness, tinnitus of the left ear, gait instability, repetitive vomiting he was admitted to the hospital in Gyöngyös
 - ▶ 15.05. – arrived to our clinic

- ▶ ENT
- ▶ Audiology
 - ▶ Anacusis on the left side
 - ▶ Normal hearing range on the right side
- ▶ Ophthalmology
 - ▶ No papilledema, or swelling of the optic disc
- ▶ Brain MRI
- ▶ Otoneurology
 - ▶ Left vestibulocochlear laesion



A little reminder...





Labyrinthitis

- ▶ Definition
 - ▶ Inflammation of the inner ear, or labyrinth
- ▶ Etiology
 - ▶ Viral
 - ▶ Bacterial
 - ▶ Autoimmun
- ▶ Symptomes
 - ▶ Tinnitus
 - ▶ Dizziness, vertigo
 - ▶ Hearing loss
 - ▶ Vegetative symptomes: nausea, vomiting, weakness
 - ▶ Nystagmus

Labyrinthitis

Therapy:

Pharmacological:

- Antibiotics
- Antiviral agents
- Corticosteroides
- Antihistamin
- Benzodiazepine

Vestibular rehabilitation

Prognosis:

- Nausea, vomiting, vertigo – days to weeks
- Hearing loss variable

Exercises in bed

- Looking up and then down
- Looking alternately left and right
- Convergence exercises

Head movements

- Bending alternately forward and backward
- Turning alternately to left and then right

Exercises in sitting position

- Shrugging and rotating shoulders
- Bending forward and picking up objects
- Turning head and trunk alternately to the left and right

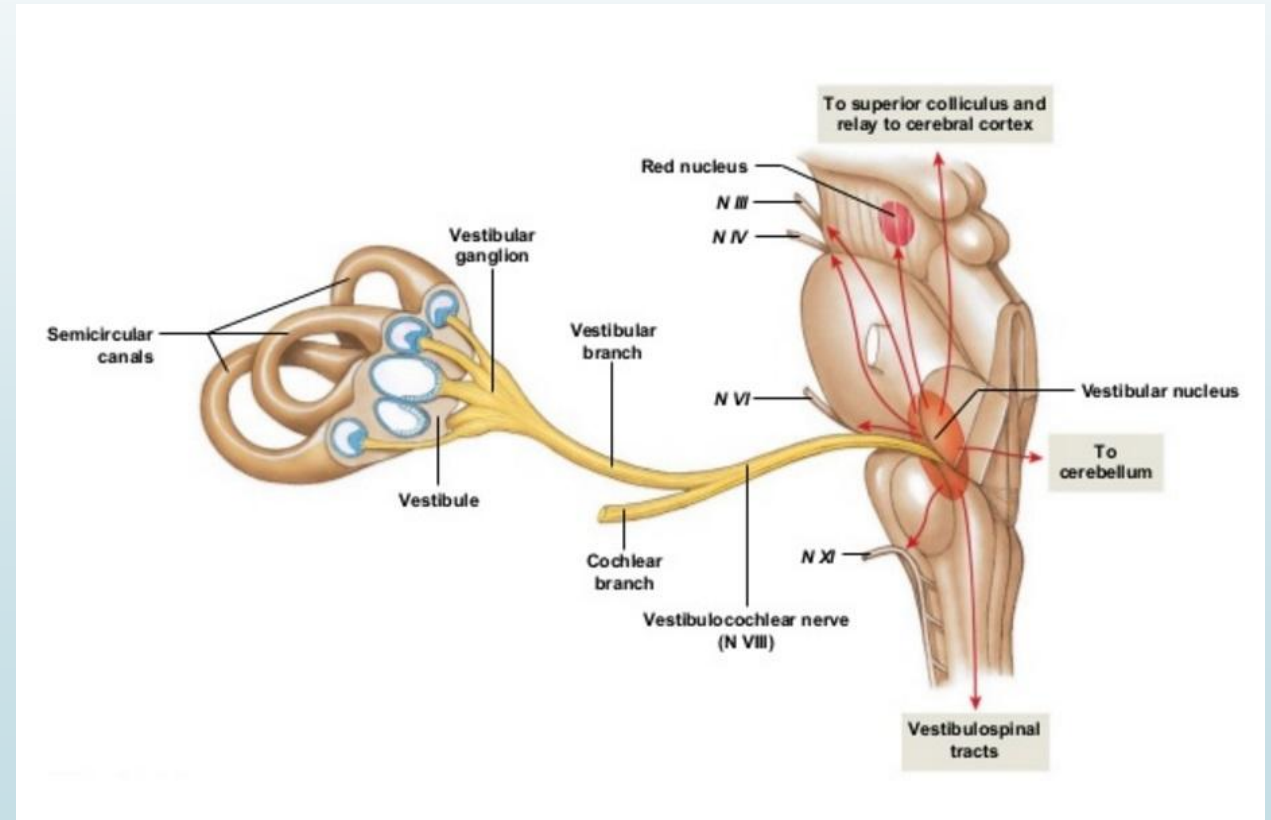


What is vertigo?

- ▶ **Dizziness:** disturbed sense of relationship to space
- ▶ **True vertigo:**
 - ▶ Subjective: perception that the patient is rotating relative to the environment
 - ▶ Objective: the environment is rotating relative to the patient
- ▶ **Pseudovertigo:** complaints of dizziness without any rotary component

Vertigo is a symptom, not a diagnosis.

- Dysfunction of the vestibular system
 - Labyrinth
 - Vestibular nerve
 - brainstem



Clinical features of central versus peripheral vertigo

	Peripheral	Central
Nystagmus		
Direction	Unidirectional, fast component toward the normal ear; never reverses direction	Sometimes reverses direction when patient looks in the direction of slow component
Type	Horizontal with a torsional component, never purely torsional or vertical	Can be any direction
Effect of visual fixation	Suppressed	Not suppressed
Other neurologic signs	Absent	Often present
Postural instability	Unidirectional instability, walking preserved	Severe instability, patient often falls when walking
Deafness or tinnitus	May be present	Absent

Causes of true vertigo

► Life threatening

- CNS infection
- Head trauma
- Middle ear trauma
- Poisoning or adverse medication effect
- Stroke
- Brain tumor

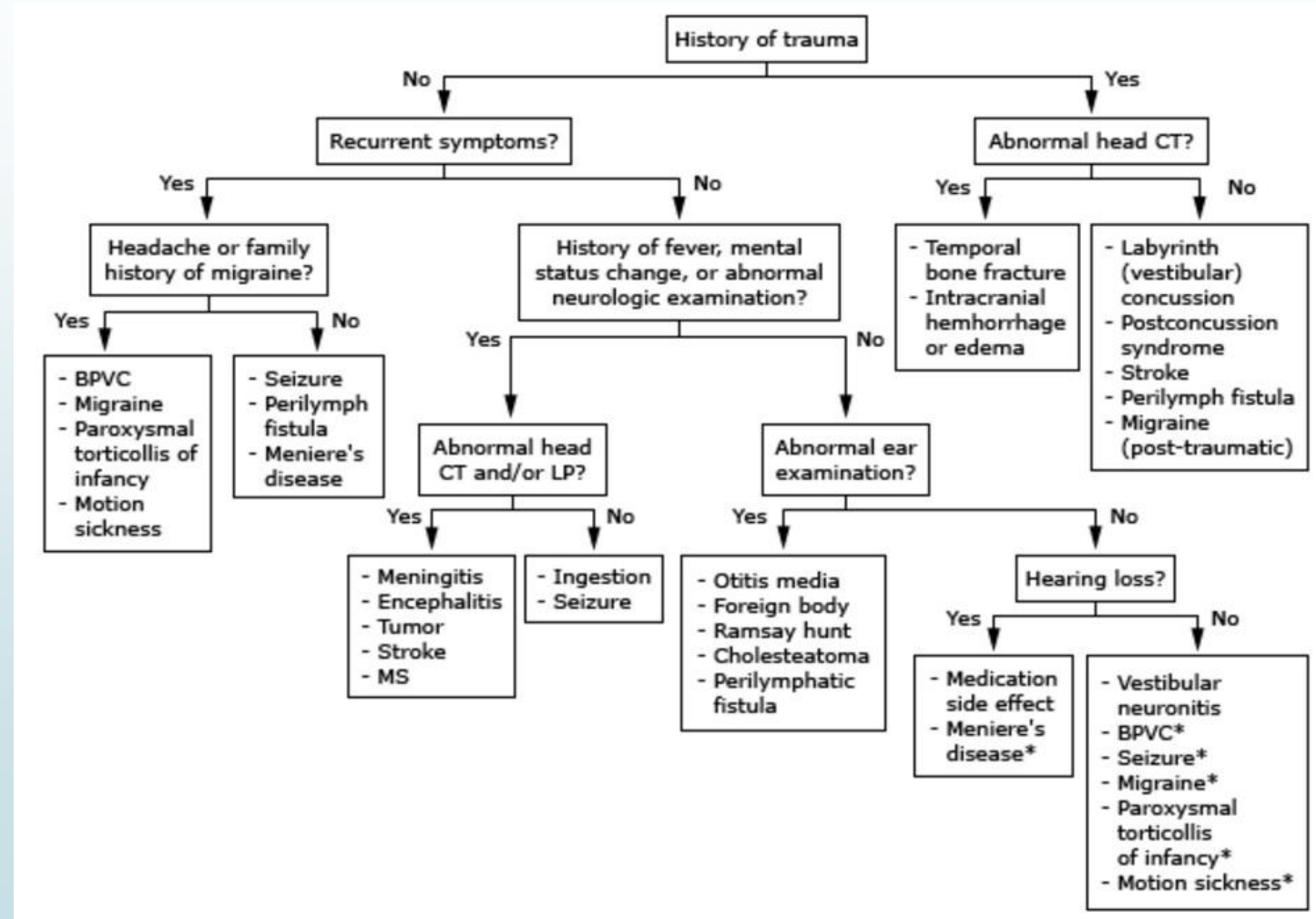
► Common

- Benign paroxysmal vertigo
- Labyrinthitis
- Migraine
- Motion sickness (seasickness)
- Otitis media

► Other

- Benign paroxysmal positional vertigo
- Cholesteatoma
- Congenital defects
- Mastoiditis
- Meniere disease
- Multiple sclerosis
- Perilymph fistula
- Ramsay Hunt sy.
- Seizure

Approach to the child with true vertigo





Causes of pseudovertigo

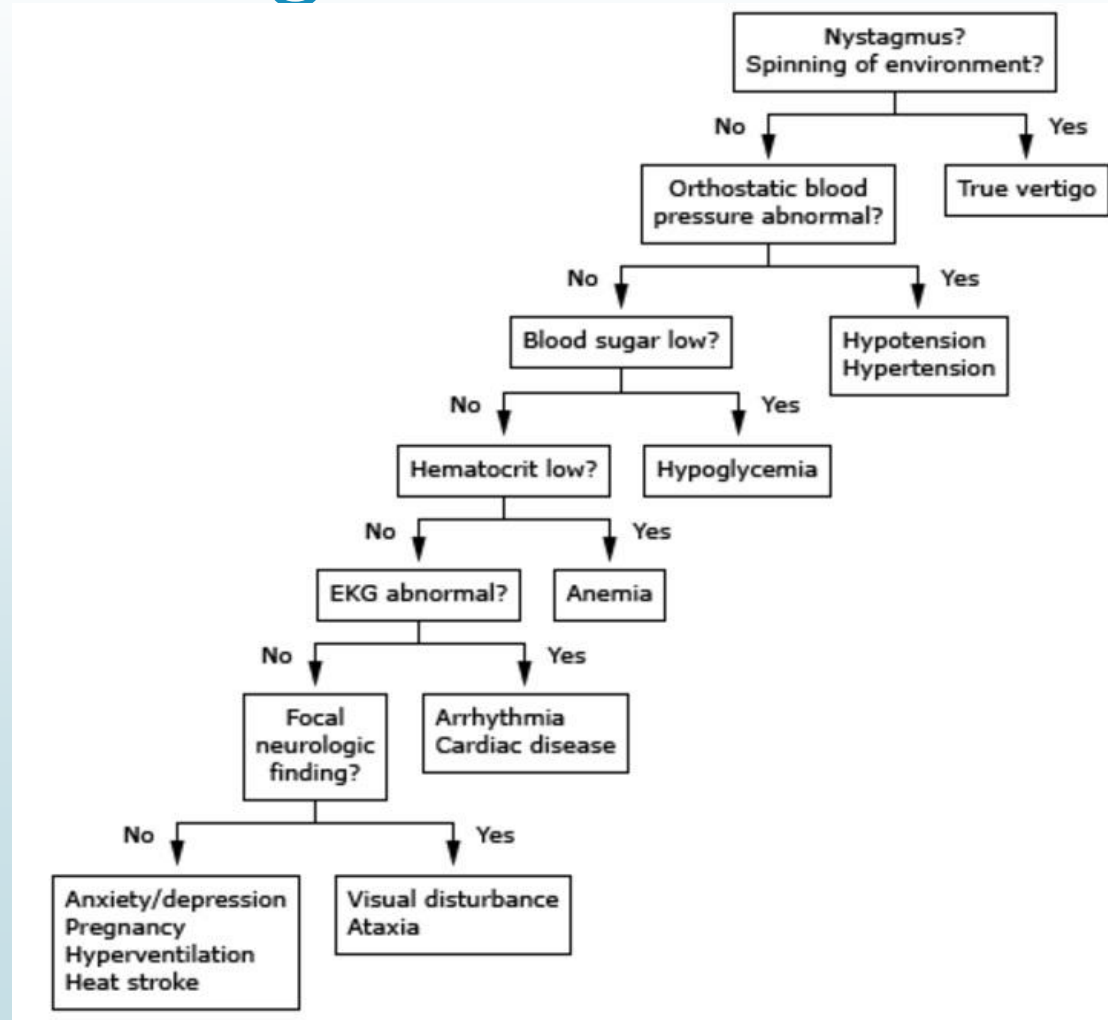
- ▶ Life threatening

- ▶ Arrhythmia
- ▶ Heat illness
- ▶ Hypoglycemia
- ▶ Poisoning or adverse medication effect

- ▶ Common

- ▶ Anemia
- ▶ Anxiety
- ▶ Depression
- ▶ Hyperventilation
- ▶ Orthostatic hypotension
- ▶ Pregnancy
- ▶ Presyncope

Approach to the child with pseudovertigo



Common diseases are common, rare diseases are rare.



Thank you for your attention!

