PC048

EQUILIBRE ET VERTIGES

Vestibular migraine : an overview of clinical features and vestibular tests

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Introduction

Vestibular migraine (VM) is characterized by the association of migraine and vestibular symptoms.

Its diagnosis is still challenging due to the overlap between its manifestations and vestibular findings with other vestibular disorders.

Objectifs

We aim at describing the clinical presentation of VM and at determining the results of cervical vestibular evoked myogenic potentials (cVEMPs) and phase shift of distortion products otoacoustic (shift-OAE).

Materials and methods

- Included patients: confirmed vestibular migraine diagnosis based on the criteria of the Barany Society.
- We studied cVEMPs and Shift-OAE measurement using ECHODIA device

- **cVEMPs measurement**.
  - Intensity: 100dB
  - Frequencies: 500 Hz and 1000 Hz
  - Studied parameters:
    - The amplitude and latencies of p13-n23
    - Frequency switch
    - Asymmetry ratio

- **Shift OAEs measurement**
  - Bitonal acoustic stimulation
  - Earphone probes
  - Positions: Sitting– lying- Sitting
  - Studied parameter: Shift of OAE

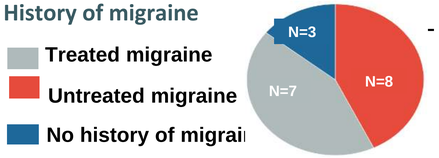
Conclusion

- Vestibular migraine mainly affects middle-aged women.
- The spectrum of its manifestations is wide. Physical and vestibular examinations are frequently normal.
- Different cVEMPs and Shift-OAE abnormalities can be observed. However, these abnormalities are not specific to this entity and can overlap with the observed findings in other vestibular pathologies such Meniere's disease.
- A comparative study between vestibular migraine and normal patients can be helpful in determining their role

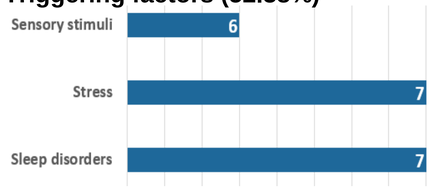
Results

- **Number of patients:** 18
- **Male to female ratio:** 0,12
- **Mean age: 41 years old**

History of migraine

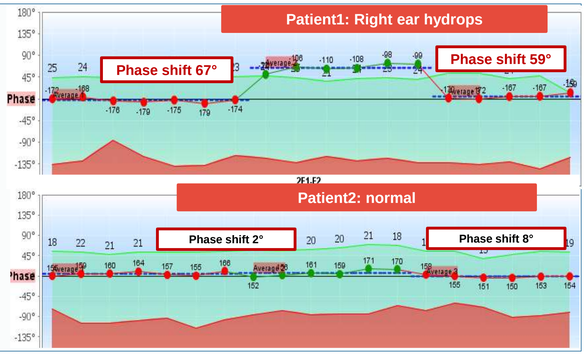


Triggering factors (52.38%)



- **Shift-OAE measurement**

		Right Side	Left side
Phase shift 1: -Seated position -Supine position	Median values	5°[19-132]	20° [1-160].
	Phase shift > 40°	4	1
Phase shift 2: -Supine position -Seated position	Median values	9.5° [0-113]	18° [1-118]
	Phase shift > 40°	4	1



- **cVEMPs measurement**

Present bilaterally at 100 dB ➔ N=16

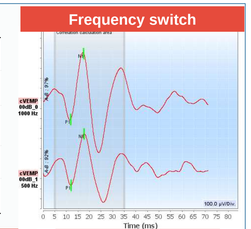
Absent bilaterally at 100 dB ➔ N=1

Present only at 110dB➔ N =1

- **The median asymmetry ratio**

17% [1-36] at 500 Hz

Parameters	Right side	Left side
p13 latencies	15.8ms [12.06-18.3]	15.63ms [12-18.06]
n23 latencies	20.04ms [15-25.06]	22.44ms [19.56-24.38]
p13-n23 amplitude	259.44 µv [117.52-886.9]	247.3 µv [73.4-756;3]
Threshold	100dB [85-100]	95 dB [90;100]



- **cVEMP abnormalities:**