A 60-year-old patient presented with vertigo. He had spontaneous horizontal nystagmus with a torsional component toward the left ear and abnormal head impulse test to the right. Brain MRI was negative. Cervical and ocular vestibular evoked myogenic potentials (cVEMP and oVEMP) showed decreased amplitudes, meaning decreased responses from the saccular (cVEMP) and utricular (oVEMP) stimulation (Fig. 1). These observations were attributed to involvement of both the superior and the inferior branch of the vestibular nerve.

The VEMP is a short-latency myogenic response evoked by brief pulses of air-conducted sound and recorded using surface muscle electrodes (1). The cVEMP assesses the descending vestibular pathway as an ipsilateral sacculocollic reflex and the oVEMP evaluates the ascending vestibular pathway as a crossed vestibulo-ocular reflex (2). As the superior

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**Key words**: Vestibular neuronitis; cervical and ocular vestibular evoked myogenic potentials.

**Fig. 1.** — Both ears were stimulated with acoustic clicks of 30 dB intensity, 1 ms duration, 1 Hz frequency. There were 50 stimulations for each ear:

a) and d): left ear stimulation – normal findings of OR and SCML.
b) and c): right ear stimulation – decreased amplitude of OL and SCMR consistent with vestibular neuronitis affecting superior and inferior branch of the right vestibular nerve.
vestibular nerve supplies the superior and lateral semicircular canals as well as the utricle, and the inferior vestibular nerve supplies the posterior canal and the saccule, it has been suggested that oVEMP actually assesses superior and cVEMP inferior branch of the vestibular nerve. This means that the patient had pan-vestibular neuronitis, which is uncommon knowing that the inferior branch is affected in only 20-30% of patients (1). In conclusion, the routine use of the VEMP’s provides a more complete initial assessment of the dizzy patient.

**Authors’ contributions**

Study concept and design: Gabelić, Adamec, Habek. Acquisition of data: Krbot, Adamec, Išgum. Analysis and interpretation of data: Gabelić, Adamec, Krbot, Išgum, Hajnšek, Habek. Drafting of the manuscript: Gabelić. Critical revision of the manuscript for important intellectual content: Gabelić, Adamec, Krbot, Išgum, Hajnšek, Habek. Administrative, technical, and material support: Gabelić, Adamec, Išgum, Krbot.

**Conflict of interest statement**

There is no conflict of interest.

**REFERENCES**


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