EMG Rectification for Vestibular Evoked Myogenic Potential Test
VEMP
Vestibular Evoked Myogenic Potential

VEMP EMG Rectification

The Vestibular Evoked Myogenic Potential (VEMP) is a short latency EMG (electromyographic) response evoked at high level acoustic stimulation and recorded from surface electrodes over the contracted sternocleidomastoid (SCM) muscle.

Electronystagmography and rotational tests only assess the horizontal semicircular canals of the vestibular system.

The VEMP assesses the saccule and inferior vestibular nerve.

The ability to identify disorders in this area of the vestibular system may improve management of patients with balance disorders. The added diagnostic information can help you design vestibular rehabilitation therapy exercises to more effectively treat patients.

EMG Rectifying

“...The tonic state of the SCM muscle is a critical parameter in the recording method of the VEMP. Thus, controlling the level of tonic EMG would appear to be a prerequisite for the accurate interpretation of the VEMP.” ¹

“The (VEMP) reflex amplitude scales in proportion to tonic EMG activity and should therefore be normalized to the level of EMG activity.” ²

The Bio-logic EMG Rectifying controls for the magnitude of the tonic SCM muscle activity by assessing its amplitude prior to stimulation and then subtracts the amount of tonic SCM muscle activity from the averaged response.

By using the Bio-logic EMG Rectifying, if a VEMP amplitude is reduced on one side compared to the other, one is assured that the response reduction is due to a vestibular abnormality and not due to a lack of tonic SCM muscle contraction caused by improper patient position or fatigue.


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