

CLINICAL AND ELECTROPHYSIOLOGICAL CHARACTERISTICS OF RETROBULBAR NEURITIS

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ABSTRACT

Optic neuritis represents an inflammatory lesion of the optic nerve, which could cause visual loss. It can be a disease isolated to the optic nerve or can be associated with a more widespread demyelinating disorder of the central nervous system, such as multiple sclerosis or neuromyelitis optica (Devic's syndrome). Optic neuritis is one of the strongest predictor for developing clinically definite multiple sclerosis. Visually evoked potentials are useful in the detection of clinical and subclinical optic neuritis and they are the non-invasive way of monitoring of the involvement of the visual system during the clinical course of multiple sclerosis. Despite some limitations, e.g. inability to localize lesions, analysis of the visually evoked potentials includes two main pathological findings, useful for diagnosis: the decrease in amplitudes, which indicates the extent of axonal damage, and the delayed latency, which is highly sensitive to focal demyelination of the optic nerve fibers. After an episode of optic neuritis, patients show significant improvement in latency p100, but it is unclear whether this improvement is caused by remyelination, by synaptic plasticity or some other mechanism.

Key words: *optic neuritis; diagnosis; evoked potentials, visual.*