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(54) Title: PREDICTION OF THE OUTCOME OF ENDOVASCULAR TREATMENT IN ACUTE ISCHEMIC STROKE PATIENTS

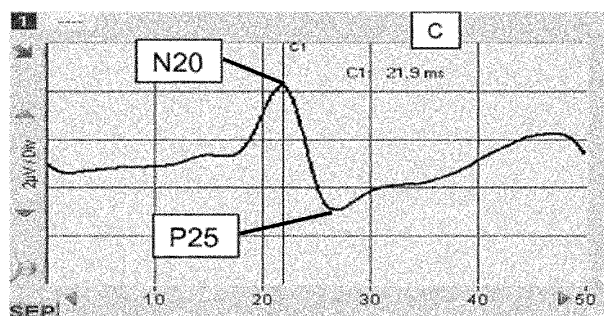


Fig. 1

(57) **Abstract:** A computer-implemented method for predicting the outcome of an endovascular stroke treatment in a patient in need thereof before the endovascular treatment is performed in the patient. The method comprises the use of an apparatus characterised by comprising: a stimulator for providing electrical stimuli to one or more pairs of stimulating electrodes for stimulating a nerve; a voltmeter connected to one or more pairs of recording electrodes for recording a somatosensory evoked potential (SEP) resulting from the electrical stimuli provided to the nerve; and a processor. The computer-implemented method is performed by the processor by carrying out the following steps: a) comparing the absolute amplitude of a local maximum or minimum of the SEP ipsilateral to the stroke is compared to a first predetermined amplitude threshold value; and b) determining that the absolute amplitude of the local maximum or minimum of the SEP ipsilateral to the stroke site above the first predetermined amplitude threshold value is indicative of a good outcome of the endovascular treatment and/or determining that the absolute amplitude of the local maximum or minimum of the SEP ipsilateral to the stroke site below the first predetermined amplitude threshold values is indicative of a bad outcome of the endovascular treatment. Additionally, or alternatively, the computer-implemented method is performed by the processor by carrying out the following steps: a) comparing the latency of a local maxima or minima of the SEP ipsilateral to the stroke to a first predetermined latency threshold value; and b) determining that the latency of a local maxima or minima of the SEP ipsilateral to the stroke site below the first predetermined latency threshold value is indicative of a good outcome of the endovascular treatment.

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