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Which is the treatment of choice for benign paroxysmal positional vertigo?

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Introduction Benign paroxysmal positional vertigo (BPPV) is a common cause of treatable peripheral vertigo. Neuro-otologists report on 70% to 90% of success after one single physical treatment. In almost all studies, additional measures such as head vibration, keeping the head patient upright for 48 hours after treatment, the use of neck collar, and repeating examination only after 72 hours have been recommended. The objective of this study was to evaluate effectiveness and possible side effects of repeated physical procedure to treat BPPV during one session.
Method Fifty consecutive BPPV patients were treated with repeated Epley manoeuvre during the same session with no additional measures (group I). Results were compared to those of 75 BPPV patients treated with a single manoeuvre only (group IIa; 50 patients) and a single manoeuvre followed by the use of a neck collar and keeping the head upright for 48 hours (group IIb; 25 patients). All patients were re-examined within a week.
Results 46 patients (92%) of group I; 40 patients (80%) of group IIa and 21 patients (84%) of group IIb were completely free of signs and symptoms when re-examined. Only one patient experienced vomiting during treatment. Transient nausea and dysequilibrium was frequently reported but well tolerated.
Conclusion Although all approaches were highly effective, repeated procedures during the same session seems to be superior and more convenient than a single manoeuvre. Additional measures are not necessary for successful treatment. No serious side effects were found or reported by patients.

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Neuro-otologic findings in a family with episodic ataxia type 2 (EA2) caused by a novel CACNA1A splice cite mutation

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Introduction Episodic ataxia type 2 (EA2) is a rare neurological disorder inherited as an autosomal dominant trait of the CACNA1A gene encoding the alpha1A-subunit of a calcium channel expressed mainly in the cerebellum. EA2 is characterized by episodes of nausea, vertigo, nystagmus, ataxia, and fatigue. Episodes are often triggered by exercise or emotional stress and relieved by acetatzolamide. Progressive cerebellar atrophy and ataxia often start later on. Interictal findings of nystagmus have been found localizing to the vestibulocerebellum.
Method We performed a neuro-otologic test pattern of static posturography, electronystagmography (ENG), audiometry and video-oculography (VOG) to an EA2-family (N=12) having a novel CACNA1A splice cite mutation (M.Kaunisto, unpublished data) and compared the results to a healthy control group.
Results The posturography and saccadic accuracy results of the EA2-family were significantly worse than those of the controls ($p<0.001$ for both). The VOG findings were mainly consistent with the previous oculomotor studies on EA2: spontaneous, gaze evoked and positional nystagmus were commonly seen. However, the oculomotor findings were heterogeneous; three patients had normal VOG. No hearing loss in audiometry or caloric weakness in ENG could be verified. Acetatzolamide corrected abnormal VOG-findings in one patient.
Conclusion Our results suggest that oculomotor and postural control disturbances are prevalent in EA2 caused by this CACNA1A mutation. The saccadic inaccuracy and nystagmus localize to the vestibulocerebellum, whereas the peripheral vestibular function as measured with caloric tests and audiometry seems to be intact.

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Guideline on mild traumatic brain injury: Report of an EFNS Task Force

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Introduction A Task Force on Mild Traumatic Brain Injury (MTBI) was set up under the auspices of the European Federation of Neurological Societies. A systematic search of the literature on existing classification systems, outcome data (CT abnormalities, need for neurosurgical intervention, mortality) and patient management was performed. It was our aim to propose an acceptable uniform nomenclature for and definition of MTBI; and to develop evidence based rules to guide initial management with respect to ancillary investigations, hospital admission, observation, and follow-up.
Results MTBI is defined as the consequence of blunt (non-penetrating) impact with sudden acceleration, deceleration, or rotation of the head with a Glasgow Coma Score of 13–15 on admission to hospital. If the duration of loss of consciousness is maximally 30 minutes and posttraumatic amnesia is less than 60 minutes, the outcome is considered good (mortality<1%) especially in the absence of risk factors. Risk factors are important and such factors should be included in a classification system to further assess the risk of immediate complications.
Conclusion The primary goal of initial management in MTBI is to identify the patients at risk of intracranial abnormalities and especially those that may need neurosurgical intervention. A clinical decision scheme (including head injury warning instructions and criteria for hospital admission) is proposed to facilitate patient management after MTBI.
Literature
Vos PE, Battistin L, Birbamer G, Gerstenbrand F, et al (2002). EFNS Guideline on Mild Traumatic Brain Injury. Report of an EFNS Task force. European Journal of Neurology; 9: 1–13.

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