Mental fatigue

Fatigue is a state of physical and/or mental weakness.

Postoperative fatigue may be considered a symptom of deterioration in cardiovascular function, neuro-muscular performance and nutritional status rather than psychological factors [1].

Fatigue is a major consequence of subarachnoid hemorrhage (SAH), but the specific characteristics are unclear.

The aim of this study was to assess mental fatigue one year after an aneurysmal subarachnoid hemorrhage and to correlate the degree of mental fatigue to functional outcome assessed with the Extended Glasgow Outcome Scale (GOSE).

One year after an aneurysmal subarachnoid hemorrhage, the GOSE was assessed and a questionnaire for self-assessment of mental fatigue, the Mental Fatigue Scale, was distributed to all included patients. The maximum score is 42 and a score of ≥10.5 indicates mental fatigue.

All patients with GOSE 8, indicating full recovery, had a mental fatigue score of <10.5. A linear correlation between the GOSE and the mental fatigue score was observed ($p < 0.0001$). : Patients with a favorable outcome and GOSE 5-7 could benefit from the assessments of mental fatigue in order to receive satisfactory rehabilitation [2].

The objective of Buunk et al., was to investigate the nature of post-SAH fatigue (mental or physical) and to determine the relationship with functional outcome in the chronic stage. Also, the possible influence of mood disorders and acute SAH-related factors (SAH type and external cerebrospinal fluid (CSF) drainage) on the presence of fatigue was investigated.

Patients with an aneurysmal SAH (aSAH) or angiographically negative SAH (anSAH) were assessed 3 to 10 years post-SAH (N = 221). Questionnaires were used to investigate mental and physical fatigue and mood. Functional outcome was examined with the Glasgow Outcome Scale Extended (GOSE). Between-group comparisons and binary logistic regression analysis were performed.

Frequencies of mental and physical fatigue were 48.4% and 38.5% respectively, with prevalence of mental fatigue being significantly higher. A two-way ANOVA with SAH type and external CSF drainage as independent variables and mental fatigue as dependent variable, showed a significant main effect of CSF drainage only ($p < 0.001$). Only mental fatigue explained a significant part of the variance in long-term functional outcome (Model $\chi 2 = 52.99$, $p < 0.001$; Nagelkerke $R^2 = 0.32$).

Mental fatigue after SAH is a serious burden to the patient and is associated with impaired long-term functional outcome. Distinguishing different aspects of fatigue is relevant as mental post-SAH fatigue might be a target for treatment aimed to improve long-term outcome [3].

1)

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3)
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