

Fatigue and quality of life after stroke: associations and influence on survival

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Aim

Fatigue after stroke is a common and distressing symptom, yet it is under-researched. We wanted to find out which patient-related factors were associated with fatigue and whether fatigue influences long-term survival. We also wanted to find out whether quality of life influenced long-term survival.

Project Outline/Methodology

We used quality of life data from more than 1000 patients recruited at UK centres of the International Stroke Trial. Quality of life had been measured at an average of 64 weeks after recruitment to the trial using two different scales: the Short-Form 36 (SF-36) and the EuroQOL. The SF-36 includes a vitality score. Lower vitality scores correspond to higher fatigue scores, so we used the vitality score as a measure of fatigue.

We used the statistical method 'logistic regression' to find out which patient-related characteristics predicted subsequent fatigue. We used Cox proportional hazards model (a different statistical test) to determine (a) whether fatigue predicted long-term survival and (b) whether quality of life (measured by the EuroQOL) predicted survival. For each analysis, we applied four different statistical methods to take into account missing data. Here we report the results when we excluded patients with missing data. Similar results were obtained irrespective of how missing data were dealt with.

Key Results

We found that the following factors were related to fatigue: older age, female, worse emotional role function and worse mental health. However, these factors explained only a small proportion

of fatigue, suggesting that other factors, which we have not identified, must also be important in the development of fatigue.

We found that fatigue had a small negative influence on long-term survival, and that quality of life, measured by the EuroQOL, also influenced long-term survival.

Conclusions

Fatigue after stroke is associated with increasing age, being female, worse emotional role function and worse mental health. Fatigue has a small influence on survival. The EuroQOL utility scale predicts long-term survival.

What does this study add to the field?

This large study has added to sparse literature on fatigue after stroke. We have confirmed results of previous small studies that fatigue is related to mood. We have also confirmed that fatigue influences long-term survival. Importantly, we have demonstrated that there must be other factors, in addition to the ones we identified, which may cause fatigue.

Implications for Practice or Policy

Health professionals involved in the care of patients after stroke need to be aware that fatigue is a common problem and that it may be related to mood disorders.

Where to next?

A large study is being set up, funded by the CSO, to explore the natural history of fatigue after stroke and to find out whether fatigue is related to being less fit and active.

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