

McGeough, E., Pollock, A., <u>Smith, L.N.</u>, Dennis, M., Sharpe, M., Lewis, S., and Mead, G.E. (2010) *Interventions for fatigue after stroke*. <u>Stroke</u>, 41 (10). e564-e565. ISSN 0039-2499

http://eprints.gla.ac.uk/42461/

Deposited on: 18 January 2012

Cochrane Corner

Section Editor: Graeme J. Hankey, MD, FRCP, FRACP

Interventions for Fatigue After Stroke

Elizabeth McGeough, MBChB; Alex Pollock, PhD; Lorraine N. Smith, PhD; Martin Dennis, FRCP; Michael Sharpe, MD; Susan Lewis, PhD; Gillian E. Mead, FRCP

Patigue after stoke is common and distressing to patients. It is unknown how to best treat fatigue after stroke, and a number different interventions may, in theory, be of benefit. Our main objective was to determine whether any treatment for fatigue after stroke reduces the proportion of patients with fatigue, the severity of fatigue, or both.

Materials and Methods

Search Strategy

We searched the Cochrane Stroke Group Trials Register (last searched January 2008), the Cochrane Central Register of Controlled Trials (*Cochrane Library* Issue 1, 2008), MEDLINE (1950–February 2008), EMBASE (1980–February 2008), CINHAL (1982–February 2008), AMED (1985–February 2008), PsychINFO (1967–February 2008), Digital Dissertations (1861–March 2008), PsychBITE (searched March 2008), PEDro (searched March 2008), and British Nursing Index (1985–March 2008). We also searched 4 trials registries, scanned reference lists, performed citation tracking of included trials, and contacted experts.

Selection Criteria

We included randomized trials of any intervention aimed at treating fatigue in adult patients with stroke, with fatigue as a primary or a secondary end point.

Data Collection and Analysis

Two reviewers independently scrutinized potentially relevant studies, applied the inclusion criteria, assessed trial quality, and extracted the data. We performed a narrative review; we had intended to perform a meta-analysis, but this was not possible because the interventions were too dissimilar and the data could not be combined.

Results

We identified 3 completed trials and 2 ongoing trials. One completed trial randomly evaluated the effect of fluoxetine or placebo on emotional disturbance after stroke in 83 patients

and found no effect on fatigue at follow-up. The second trial evaluated the effect of tirilazad mesylate in 31 women with subarachnoid hemorrhage, of whom 18 were available for follow-up. There was no difference in fatigue between the 2 groups at follow-up. The third trial evaluated a complex, multicomponent intervention (Chronic Disease Self-Management Programme) in 1150 community-based patients with chronic diseases, of whom 125 (11%) had experienced a stroke. No significant differences were found for fatigue scales between control and intervention groups at follow-up in the subgroup of patients with stroke.

One ongoing trial is randomizing patients with sleepdisordered breathing after stroke to continuous positive airway pressure or sham continuous positive airway pressure; fatigue severity score is a secondary end point. The other is randomizing 96 patients with stroke to a cognitive treatment vs a cognitive treatment plus graded exercise, and it is including fatigue as an outcome measure.

Conclusions

Implications for Practice

Currently, there is insufficient evidence to guide practice in treating fatigue after stroke.

Implications for Research

More research is urgently needed to develop and test treatments for fatigue after stroke. Further work could be usefully performed to explore associations of fatigue after stroke, which might provide targets for treatment. Given that some observational studies have found an association between fatigue and mood disorders, the development of a cognitive intervention might be a logical step forward.

Note: The full review for "Interventions for Fatigue After Stroke" is published in Issue 3, 2009, of the *Cochrane Library*.

Received June 17, 2009; final revision received September 30, 2009; accepted October 8, 2009.

From Medicine of the Elderly Department (E.M.), Edinburgh Royal Infirmary, Edinburgh, UK; Nursing, Midwifery, and Allied Health Professions Research Unit (A.P.), Glasgow Caledonian University, Glasgow, UK; Division of Nursing and Health Care (L.N.S.), Faculty of Medicine, University of Glasgow, Glasgow, UK; Division of Clinical Neurosciences (M.D.), University of Edinburgh, Edinburgh, UK; Psychological Medicine Research (M.S.), School of Molecular and Clinical Medicine, University of Edinburgh, Edinburgh, UK; School of Clinical Sciences and Community Health (S.L.), University of Edinburgh, Edinburgh, UK; School of Clinical Sciences and Community Health (G.E.M.), University of Edinburgh, Edinburgh, UK.

Correspondence to Elizabeth C. McGeough, Specialist Registrar, Department of Medicine for the Elderly, New Royal Infirmary of Edinburgh, Little France Crescent, Edinburgh, EH16 4SA, UK. E-mail liz.mcgeough@luht.scot.nhs.uk

(Stroke. 2010;41:e564-e565.)

© 2010 American Heart Association, Inc.



McGeough, E., Pollock, A., <u>Smith, L.N.</u>, Dennis, M., Sharpe, M., Lewis, S., and Mead, G.E. (2010) *Interventions for fatigue after stroke*. <u>Stroke</u>, 41 (10). e564-e565. ISSN 0039-2499

http://eprints.gla.ac.uk/42461/

Deposited on: 18 January 2012

Disclosures

None.

References

- Choi-Kwon S, Choi J, Kang D-W, Kim JS. Fluoxetine is not effective in the treatment of post-stroke fatigue: a double-blind, placebo-controlled study. *Cerebrovasc Dis.* 2007;23:102–108.
- Ogden JA, Mee EW, Utley T. Too little, too late: does tirilazad mesylate reduce fatigue after subarachnoid haemorrhage? *Neurosurgery*. 1998;4: 782–787.
- 3. Lorig KR, Ritter P, Stewart AL, Sobel DS, Brown BW, Bandura A, Gonzalez VM, Laurent DD, Holman HR. Chronic disease self-

- management program: 2-year health status and health care utilization outcomes. *Med Care*. 2001;39:1217–1223.
- Brown D. SATS. Sleep Apnea Treatment after Stroke. Stroke Trials Directory, Internet Stroke Center. Available at: www.strokecenter.org/ trials/. Accessed.
- Fasotti L. Effectiveness of cognitive and graded activity training (COGRAT) on post stroke fatigue. A multi-center study. Available at: http://www.onderzoekinformatie.nl/en/oi/nod/onderzoek/OND1326577/. Accessed.

KEY WORDS: interventions ■ fatigue ■ stroke