Effects of EMMETT lymphatic drainage on sleep behaviour, cognitive function and quality of life in mild and moderate dementia – A randomised controlled pilot study

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Background: Dementia is on the rise worldwide. The modern lifestyle seems to be one of the reasons.
A key role player are neuroinflammatory processes and the accumulation of misfolded proteins. Accumulations of amyloid beta and tau fibrils disrupt communication and the supply of nutrients to brain cells, ultimately leading to irreversible cell loss.
In 2012, a group of researchers discovered the glymphatic clearance system. It is linked to the lymphatic system and promotes the removal of metabolic substances from the brain. Activating this system could therefore be a potential therapeutic benefit in the treatment of dementia.

Methods: In this pilot study, 26 patients aged above 65 years with mild and moderate dementia are randomly assigned to an intervention or a control group. While the people in the control group continue to receive their previous care unchanged, the participants in the intervention group receive a 30-minute manual EMMETT-treatment twice a week for four weeks, which activates lymphatic drainage through soft stroking and pumping movements.
The effects of this therapy on the patients' sleep behaviour, cognitive functions and quality of life are measured using the Mini-Mental Status Test, the Short Form-12 and a non-standardised questionnaire based on the Insomnia Severity Index before the start and after the end of the intervention. The statistical analysis is carried out with SPSS.

Results: The 13 people in the intervention group show a mild improvement in falling asleep, sleeping during extended periods of time, daily performance, memory ability and physical well-being immediately during / after the intervention period. For example, the average MMST total score in the intervention group improved from 17.08 to 19.31, while the control group showed a slight deterioration from 18.85 to 18.31. Other parameters such as emotional well-being show no clear trend. The 13 patients in the control group show either no changes or slight deterioration in the functions tested.

Conclusions: The results of this study suggest that EMMETT lymphatic drainage could be a promising treatment method for early-stage dementia. However, further larger, and more comprehensive studies are needed to confirm these results and to assess long-term efficacy.

(346 words)

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