Very early versus delayed mobilization after stroke: systematic review and meta-analysis

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Objective
To determine whether very early mobilization (VEM, helping a patient get out of bed within 48 hours after stroke onset) improves or harms recovery after stroke

Methods
We searched the Cochrane Stroke Group trials register, 19 English language electronic databases, Wanfangdata (Chinese language medical database), relevant ongoing trials, research registers and reference lists, and contacted researchers in the field.

We selected unconfounded randomized controlled trials and compared mobilization commencing within 48 hours of stroke with usual stroke care.

One author eliminated obviously irrelevant records, two independently selected English language trials and two independently extracted data, assessed risk of bias and applied the GRADE approach to the quality of evidence.

Results
Seventy four full papers were assessed. Nine trials were included (n=2958). Participants were median age 68 years, 52% males. Stroke severity was typically moderate. Zero to -20% had intracerebral haemorrhage. VEM participants started mobilization median 18.5 hours (13.1 to 43) after stroke compared with 33.3 hours (22.5 to 71.5) in usual care. VEM did not increase the number of people who survived or made a good recovery after their stroke (OR 1.08, 0.92 to 1.26; Figure). Mean ADL score was higher in the VEM groups (1.94, 0.75 to 3.13, P=0.0001) but evidence quality was low.

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Conclusions
Commencing mobilization earlier after stroke did not improve death or poor outcome.

Implications
Commencing mobilization earlier did not increase survival or good outcome. Possible risks with commencement <24 hours need clarifying.

Further research is needed to determine the optimal dose and timing of mobilization after acute stroke.

Acknowledgement
The Cochrane Library should be consulted for the most recent version of this review (see www.thecochranelibrary.com). . Langhorne P, Collier JM, Bate PJ, Thuy MNT, Bernhardt J. Very early versus delayed mobilisation after stroke. Cochrane Database of Systematic Reviews 2018, Issue 10. Art. No.: CD006187. DOI:10.1002/14651858.CD006187.pub3
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Disclosures
Authors Julie Bernhardt, Janice Collier and Peter Langhorne are trialists in at least one of the included trials. They were not involved in trial selection or assessment in this update. Authors Patricia Bate and Matthew Thuy report no conflicts.

Footnotes
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Figure Title

Figure. Death or poor outcome at end of scheduled follow-up