FULL-LENGTH ARTICLE NPub.org/q2x152

Early mobilization and quality of life after stroke

Findings from AVERT

Toby B. Cumming, PhD, Leonid Churilov, PhD, Janice Collier, PhD, et al., on behalf of the AVERT Trial Collaboration group

Cite as: *Neurology*® 2019;93:e717-e728. doi:10.1212/WNL.0000000000007937

Correspondence
Dr. Bernhardt
julie.bernhardt@florey.edu.au

Study objective and summary result

To determine whether earlier and more frequent rehabilitation sessions after stroke improve health-related quality of life (QOL). There was no difference in QOL at 12 months poststroke between the intervention and usual care groups.

Classification of evidence

Class II.

What is known and what this paper adds

Little was known beyond these investigators' earlier phase 2 trial that suggested a benefit of earlier and more frequent rehabilitation on one aspect of poststroke QOL. This large trial provides evidence against such an effect.

Participants and setting

AVERT (A Very Early Rehabilitation Trial) included 2,104 adults with ischemic or hemorrhagic stroke (61% male; mean age, 70.6 ± 12.8 years). Participants were recruited (years 2006–2015) within 24 hours of confirmed stroke from 56 sites in Australia, the UK, Singapore, Malaysia, and New Zealand.

Design, size, and duration

This phase 3 trial used a computer-generated randomization schedule with stratification by site and stroke severity to assign participants to either a usual care control group (n = 1,050) or an intervention group receiving early and more frequent rehabilitation (n = 1,054). Assessors were blinded to group and used the Assessment of QOL 4-D (AQoL-4D) to evaluate QOL at 12-month poststroke. Bootstrapped median regression was used to analyze QOL outcomes.

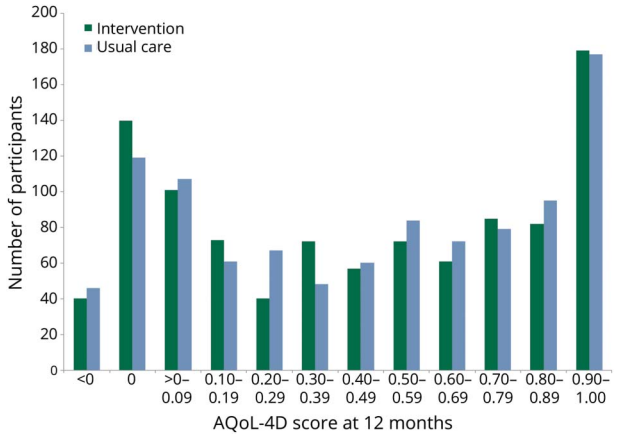
Primary outcome measures

For this analysis, 12-month AQoL-4D scores was primary.

Main results and the role of chance

No difference in 12-month AQoL-4D score between intervention (median = 0.47, IQR 0.07–0.81) and usual care (median = 0.49, IQR 0.08–0.81) groups (p = 0.86).

Figure AQoL-4D score distributions in the intervention and control groups



Harms

The intervention and control groups had similar adverse event frequencies at 3-month.

Bias, confounding, and other reasons for caution

Refusal, lost to follow-up and missing data were 4% (n = 87).

Generalizability to other populations

Broad inclusion criteria and international recruitment favors the generalizability of results.

Study funding/potential competing interests

This study was funded by the Australian National Health and Medical Research Council (NHMRC), Chest Heart and Stroke Scotland, Northern Ireland Chest Heart and Stroke, Singapore Health, the UK Stroke Association, and the UK National Institute of Health Research. Some authors report receiving fellowships from the NHMRC, the Australian Research Council, and the National Heart Foundation of Australia. Go to Neurology.org/N for full disclosures.

Trial registration number

ACTRN12606000185561 at anzctr.org.au.

A draft of the short-form article was written by M. Dalefield, a writer with Editage, a division of Cactus Communications. The authors of the full-length article and the journal editors edited and approved the final version.

Early mobilization and quality of life after stroke: Findings from AVERT

Toby B. Cumming, Leonid Churilov, Janice Collier, et al.

Neurology 2019;93;e717-e728 Published Online before print July 26, 2019
DOI 10.1212/WNL.0000000000007937