Interventions for treating urinary incontinence after stroke in adults

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Background

Urinary incontinence can affect 40% to 60% of people admitted to hospital after a stroke; 25% and 15% still have problems at discharge and one year respectively.

Objectives

To assess the effects of interventions for treating urinary incontinence after stroke in adults at least one-month post-stroke.

Search methods

We searched the Cochrane Incontinence and Cochrane Stroke Specialised Registers (searched 30 October 2017 and 1 November 2017 respectively) and hand searched journals and conference proceedings.

Selection criteria

We included randomised or quasi-randomised controlled trials.

Data collection and analysis

Two review authors independently undertook data extraction, risk of bias assessment and implemented GRADE.

Main results

We included 20 trials (reporting 21 comparisons) with 1338 participants. Interventions in the included trials included behavioural interventions, specialised professional input interventions, complementary therapy interventions, pharmacotherapy interventions, and physical therapy interventions. Findings for our main comparison, **intervention versus no intervention/usual care**, are presented below.

Findings

Behavioural interventions: Low-quality evidence suggests behavioural interventions may reduce the mean number of incontinent episodes in 24 hours (mean difference (MD) –1.00, 95% confidence interval (CI) –2.74 to 0.74; 1 trial; 18 participants; P = 0.26). Further, low-quality evidence from two trials suggests that behavioural interventions may make little or no difference to quality of life (SMD -0.99, 95% CI -2.83 to 0.86; 55 participants).

Specialised professional input interventions: One trial of moderate-quality suggested structured assessment and management by continence nurse practitioners probably made little or no difference to the number of people continent three months after treatment (risk

ratio (RR) 1.28, 95% CI 0.81 to 2.02; 121 participants; equivalent to an increase from 354 to 453 per 1000, 95% CI 287 to 715).

Complementary therapy: Five trials assessed complementary therapy using traditional acupuncture, electroacupuncture and ginger-salt-partitioned moxibustion plus routine acupuncture. Low-quality evidence from five trials suggested complementary therapy may increase the number of participants continent after treatment; participants in the treatment group were three times more likely to be continent (RR 2.82, 95% CI 1.57 to 5.07; 524 participants; equivalent to an increase from 193 to 544 per 1000, 95% CI 303 to 978).

Physical therapy: Two trials reporting three comparisons suggest that physical therapy using transcutaneous electrical nerve stimulation (TENS) may reduce the mean number of incontinent episodes in 24 hours (MD –4.76, 95% CI –8.10 to –1.41; 142 participants; low-quality evidence). One trial of TENS reporting two comparisons found that the intervention probably improves overall functional ability (MD 8.97, 95% CI 1.27 to 16.68; 81 participants; moderate-quality evidence).

Conclusions

There is insufficient evidence to guide continence care of adults in the rehabilitative phase of stroke. As few trials tested the same intervention, conclusions are drawn from few, usually small, trials. Many trials were limited by poor reporting, making it impossible to judge the extent to which they were prone to bias.

More appropriately powered, multi-centre trials of promising interventions (e.g. TENS) are required to provide robust evidence.

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Reference and Copyright requirements:

a) This paper is based on a Cochrane Review published in The Cochrane Library 2019, Issue 2 (see www.thecochranelibrary.com for information). Cochrane Reviews are regularly updated as new evidence emerges and in response to feedback, and The Cochrane Library should be consulted for the most recent version of the review.

b) Thomas LH, Coupe J, Cross LD, Tan AL, Watkins CL. Interventions for treating urinary incontinence after stroke in adults. Cochrane Database of Systematic Reviews 2019, Issue 2. Art. No.: CD004462. DOI: 10.1002/14651858.CD004462.pub4.

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