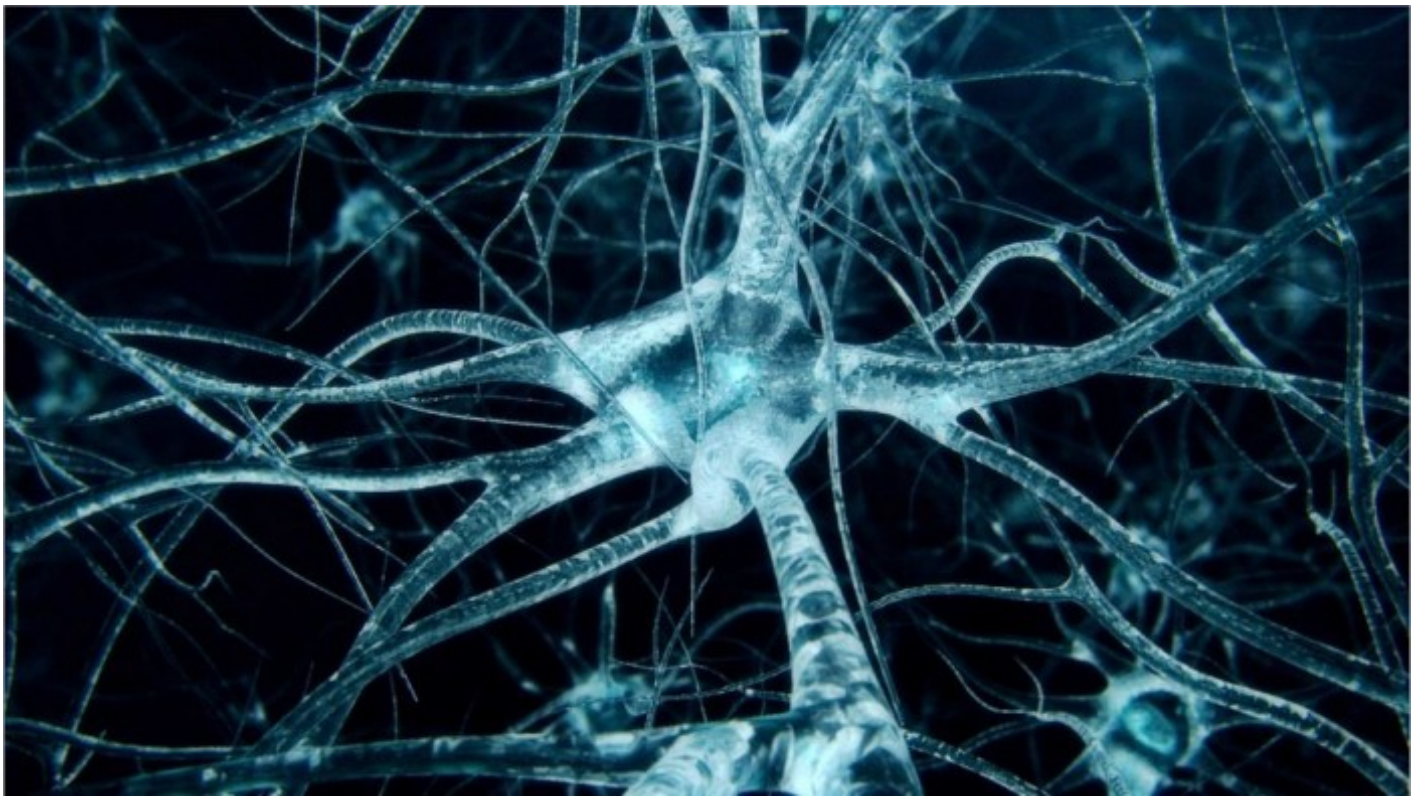
ANATOMY & PHYSIOTHERAPY
Helping you care

21 April 2017



Psychosomatic

Biofeedback to improve lower limb function after stroke

Does it have added value on top of usual care?

Author : The Australian Physiotherapy Association

Rehabilitation after stroke typically involves repetitive task practice, with verbal feedback from a physiotherapist about performance. Feedback to the patient can be supplemented with biofeedback, that is, instant objective information about any aspect of the task (eg, position, force, muscle activation) via any sense (eg, visual, auditory, tactile). Previous reviews of the effect of biofeedback in stroke have been favourable, but have included trials with low methodological quality and trials where the amount of therapy time in the biofeedback and control group were not matched. A new review included only high quality trials that compared equal amounts of therapy either with or without biofeedback.

Despite these more stringent criteria, the current review was able to include many new trials. Overall, the review provides a robust estimate that biofeedback has a moderately greater benefit on the performance of lower limb activities than usual rehabilitation (i.e. therapist communication) in improving activities of the lower limb, such as standing up, standing and walking.

Biofeedback is currently used infrequently, even though many biofeedback machines are relatively inexpensive and easily available. This study therefore gives physiotherapists working with people after stroke the impetus to utilise biofeedback more widely in their clinical practice, with the anticipated benefit of greater improvements in the patients' ability to stand up from sitting, maintain a standing position, and to walk.

Want to read deeper into this topic? Have a look at the free full text version of this article published in Journal of Physiotherapy!