

Dick et al, 2020 Swallow Rehab After Spinal Injury Abstract

Swallowing Rehabilitation Following Spinal Injury

Objective

For many patients following spinal injury, dysphagia resolves during the acute phase of post-surgical recovery. However, for some, significant pharyngeal impairments persist. The study examined the potential to regain functional swallowing following an intensive tailored therapy program.

Results

The study demonstrated the potential to regain functional swallowing following a six-week tailored rehabilitation program. It indicated that high-quality research exploring efficacy of rehabilitation programs in patients after spinal injury are warranted.

Participants and Researchers

Four spinal injury patients with persisting dysphagia engaged in a six-week (three times weekly) individualized progressive rehabilitation program.

The researchers were *Shaolyn Dick*, *Jess Thomas* and *Anna Miles*, Speech Science, University of Auckland, Auckland, New Zealand; and *Jessica McMillan* and *Kelly Davis*, Counties Manukau Health, Auckland, New Zealand.

Methods

Objective video fluoroscopic measures of timing and displacement and a validated self-reported questionnaire were employed in the study. The Eating Assessment Tool (EAT-10) was used pre-therapy, immediately post-therapy and repeated at three months. Feeling and fatigue scale scores were taken before and after each therapy session.

Surface electromyography (sEMG) was used in all therapy sessions utilising the **NeuroTrac MyoPlus** device (Verity Medical) with Verity software.

Surface EMG provided biofeedback and motivation during the sessions, allowing patients to better monitor and modify their performance. **Surface EMG** readings were also used by the researchers, alongside feeling and fatigue scale scores, to set intensity thresholds for patients and gauge progression in intensity.

The full abstract can be found at <https://pubmed.ncbi.nlm.nih.gov/32441589/>.

Or

<https://www.tandfonline.com/doi/full/10.1080/10790268.2020.1762828?scroll=top&needAccess=true>