

ResearchOnline@ND

University of Notre Dame Australia  
ResearchOnline@ND

Health Sciences Conference Papers

School of Health Sciences

2009

## Cortical Training in the Management of Acute Upper Limb Burns: a pilot randomised controlled trial

L M. Zorzi

D Edgar

Benedict M. Wand

*University of Notre Dame Australia*, [Benedict.Wand@nd.edu.au](mailto:Benedict.Wand@nd.edu.au)

F Wood

Follow this and additional works at: [http://researchonline.nd.edu.au/health\\_conference](http://researchonline.nd.edu.au/health_conference)



Part of the [Medicine and Health Sciences Commons](#)

This conference paper was originally published as:

Zorzi, L. M., Edgar, D., Wand, B. M., & Wood, F. (2009). Cortical Training in the Management of Acute Upper Limb Burns: a pilot randomised controlled trial. *Australian Physiotherapy Association Conference Week*.

This conference paper is posted on ResearchOnline@ND at [http://researchonline.nd.edu.au/health\\_conference/15](http://researchonline.nd.edu.au/health_conference/15). For more information, please contact [researchonline@nd.edu.au](mailto:researchonline@nd.edu.au).



**Name of Conference:** *Australian Physiotherapy Association Conference Week*

**Location and Date of Conference:** *Sydney, 1-5<sup>th</sup> October 2009*

**Cortical training in the management of acute upper limb burns: a pilot randomised controlled trial.**

**Zorzi LM**<sup>1</sup>, Edgar D<sup>2</sup>, Wand B<sup>1</sup>, Wood F<sup>2</sup>

<sup>1</sup>University of Notre Dame Australia, Perth

<sup>2</sup>Royal Perth Hospital, Perth

The aim of this study is to examine the feasibility, safety and efficacy of a prophylactic cortical training programme in patients with an acute upper limb burn. A randomised controlled pilot study is being carried out at the Royal Perth Hospital (RPH) Telstra Burns Outpatient Department. Subjects who have sustained isolated upper limb burns and presented to RPH within seven days of injury are randomised into experimental or control groups. Subjects in the control condition receive usual physiotherapy care for four weeks; those in the experimental group receive usual care and the addition of a cortical training programme which includes hand laterality recognition training, mirror visual feedback exercises, and sensory discrimination training. The primary outcomes are upper limb function (QuickDASH) and pain intensity (Pain Detect Measure) at four weeks. Secondary outcomes include distress (Post Traumatic Checklist) fear avoidance (Modified Tampa Scale of Kinesophobia) self efficacy (Pain Self Efficacy Questionnaire) and hand laterality recognition performance (accuracy and speed). QuickDASH and Pain Detect Measure are also recorded weekly to monitor for adverse affects. Results to date will be presented. Initial analyses indicate the feasibility and safety of the technique in UL burn patients. However, a number of questions are raised with respect to the timing of treatment and the long term implications of such input.