

Driving functional recovery after spinal cord injury using transcutaneous electrical spinal cord neuromodulation (TESCoN)

Researchers at the University of Melbourne and Austin Health are seeking volunteer research participants to be involved in a study investigating the effects of a new treatment, a non-invasive method of spinal cord stimulation (called transcutaneous electrical spinal cord neuromodulation – TESCoN) on recovery of arm and hand function. This is thought to modulate (alter the activity of) spinal cord pathways that have been spared by the injury but are not working normally. The stimulation might enable voluntary movement. When combined with rehabilitation of the arm and hand, TESCoN is believed to alter connections within the spinal cord, leading to improved function. This project has been approved by the Austin Health Human Research Ethics Committee.

Would the research study be a good fit for me?

The study might be a good fit for you if:

- You have tetraplegia with motor function below C4 as a result of traumatic spinal cord injury
- The time since your injury is 3-6 months, or 12 months or more
- You are aged between 15 and 75 years
- You do not have any other neurological condition or injury
- You do not have any implanted device (e.g. pacemaker)
- You have not had previous tendon or nerve transfer surgery in the hand or arm

What would happen if I took part in the research study?

If you decide to take part in the research study, you would be asked to attend the Royal Talbot Rehabilitation Centre for screening, medical clearance and other assessments, then attend Monday to Friday for a period of 4 weeks to receive TESCoN plus intensive therapy for your arm and hand. You will be re-assessed after the intervention and again at 3 months. Each session will take 3-4 hours.

Will I be paid to take part in the research study?

You will be reimbursed for any reasonable travel, parking and refreshment expenses.

Who do I contact if I want more information or want to take part in the study?

If you would like more information or are interested in being part of the study, please contact:

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