



Enhancing the effect of physical therapy for motor impairment after stroke with Theta Burst Stimulation

Can brain stimulation help people with hand weakness after a stroke?

We would like to inform you about a research project currently running at the Institute of Neurology and the National Hospital of Neurology and Neurosurgery, Queen Square, London.

The research is looking into the possibility of using a method of stimulating the brain, called Transcranial Magnetic stimulation (TMS), to speed up the natural processes of recovery from stroke. TMS works by generating brief magnetic fields via a probe held over the head. It is non-invasive and completely painless. This method has been used for many years to study the circuits of the brain. Theta Burst Stimulation is a particular type of magnetic stimulation that can change the activity of the brain for up to one hour. We are now investigating if this type of magnetic stimulation can be used to enhance the effect of traditional physical therapy and lead to better recovery than therapy alone.

In short, the study involves daily therapy sessions (brain stimulation + physical therapy for the hand) for 10 consecutive working days. Brain stimulation is very short (few seconds or minutes) and the whole session will last around one hour.

At the moment we are studying people who had a stroke at least one year ago. We are focusing on the recovery of the arm and particularly the hand and we want to recruit people who can move their hand a little even though it is still weak. We may also have to exclude some people who cannot have Magnetic stimulation for other reasons.

Below you can find a simple questionnaire that you are invited to fill in and mail to the address provided. That would help us to identify people who are most likely to be suitable to take part and save you from unnecessary nuisance. We will reply to all queries, even if you are unable to take part in this particular study.

If, for some reason, you cannot access the questionnaire you can just send your contact details to the address below and we will mail one to you as soon as possible.

Alternatively, if you just want to learn more you can contact Dr Penelope Talelli.
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