

Target Area: Sensory/ Perceptual/ Visuospatial > Neglect/ Inattention

<p>Koch, G., Bonni, S., Giacobbe, V., Bucchi, G., Basile, B., Lupo, F., et al. (2011). Theta burst stimulation of the left hemisphere accelerates recovery of hemispatial neglect <i>Neurology</i> 78: 24-30.</p>	<p>PEDro score: 8/10</p>
<p>Method/Results</p>	<p>Rehabilitation Program</p>
<p><b>Design</b></p> <ul style="list-style-type: none"> <li>➤ <b>Study Design:</b> RCT</li> <li>➤ <b>Population:</b> Subacute ischemic stroke patients</li> <li>➤ <b>Groups:</b> <ol style="list-style-type: none"> <li>1. Treatment (n=9) – received cTBS over left PPC, along with standard cognitive rehabilitation</li> <li>2. Control (n=9) – received sham cTBS over left PPC, along with standard cognitive rehabilitation</li> </ol> </li> <li>➤ <b>Setting:</b> Neurorehabilitation unit</li> </ul> <p><b>Primary outcome measure:</b></p> <ul style="list-style-type: none"> <li>➤ Behavioral Inattention Test (BIT)</li> </ul> <p><b>Secondary outcome measure:</b></p> <ul style="list-style-type: none"> <li>➤ Paired-pulse TMS technique to measure MEP amplitude before and after cTBS intervention (measure of changes in functional connectivity/excitability between PPC and M1).</li> </ul> <p><b>Results:</b></p> <ol style="list-style-type: none"> <li>1) cTBS intervention produced improvements in visuospatial neglect, both immediately after the 2 week treatment period, and at follow-up a further 2 weeks later.</li> <li>2) cTBS intervention reduced PPC-M1 functional connectivity/excitability, both immediately after the 2 week treatment period, and at follow-up a further 2 weeks later.</li> </ol>	<p><b>Aim:</b> To investigate whether continuous theta-burst stimulation aids recovery from visuospatial neglect in subacute stroke patients</p> <p><b>Materials:</b> Magnetic stimulators.</p> <p><b>Treatment Plan:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Duration:</b> 10 days (Mon-Fri for 2 weeks); 20 sessions in total.</li> <li>➤ <b>Procedure:</b> <ul style="list-style-type: none"> <li>○ 2 sessions per day, with interval of 15mins.</li> </ul> </li> <li>➤ <b>Content:</b> <ul style="list-style-type: none"> <li>= <b>Treatment:</b> Received 3-pulse bursts at 50Hz, every 200ms, for 40s (600 pulses in total). Delivered at 80% of active motor threshold, over left PPC.</li> <li>= <b>Sham:</b> As above, except that coil was angled at 90°, so that stimulation was directed away from scalp whilst still ensuring “the same acoustic sensation as for real TBS”.</li> </ul> </li> </ul>