

Supplemental Digital Content 2. Kilohertz-level Spinal Cord Stimulation Induced Greater Reversal of Mechanical Hypersensitivity in Nerve-injured Rats than Did Conventional 50-Hz Stimulation

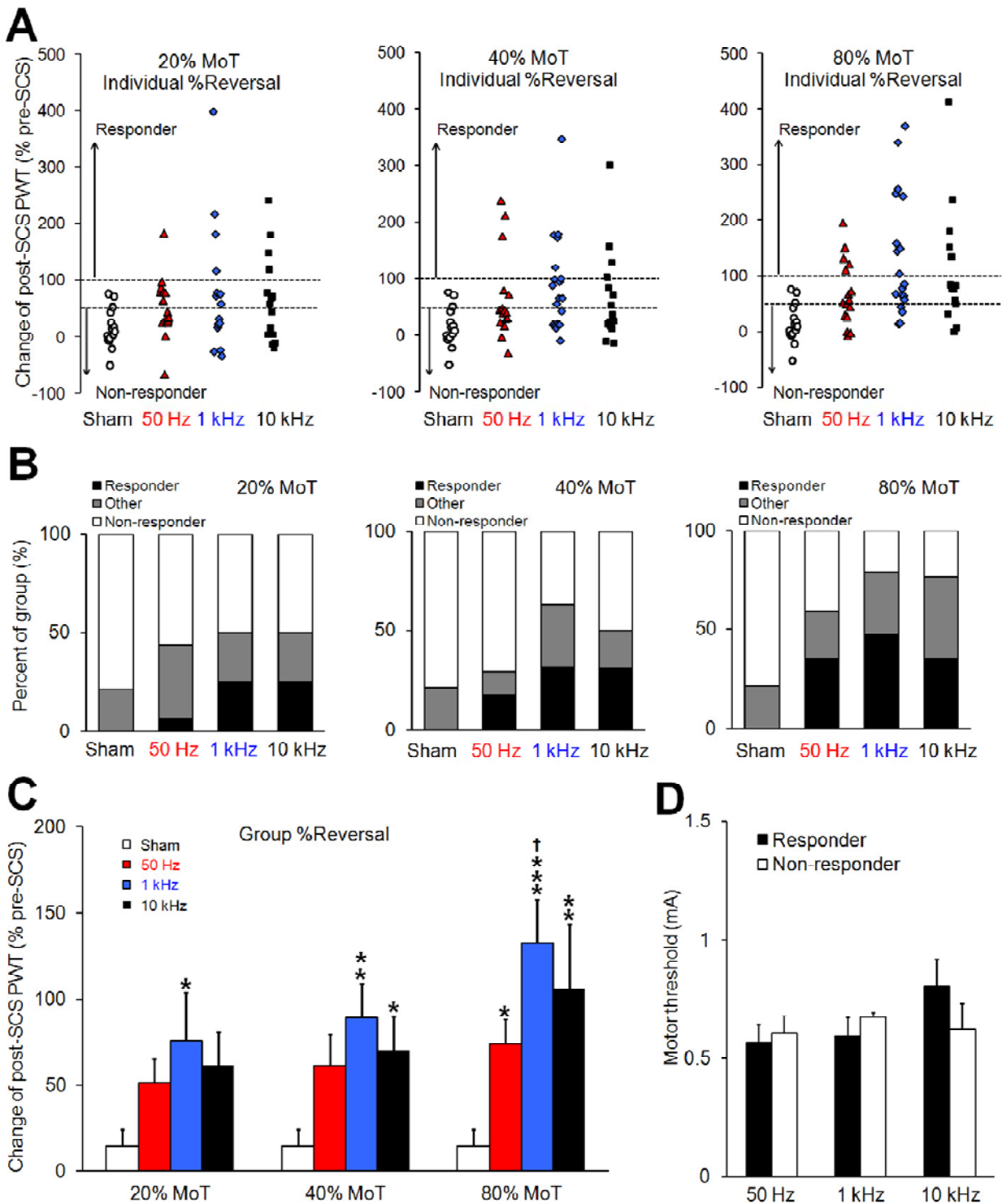


Fig. 1. **(A)** To evaluate the overall inhibitory effect of the three daily spinal cord stimulation (SCS) treatments on mechanical hypersensitivity in each animal, we first calculated the “mean post-SCS paw withdrawal threshold (PWT) of three SCS” by averaging the PWTs across the three SCS treatments for each individual animal. Then the “percent change of post-SCS PWT” was calculated as follows: percent change of post-SCS PWT = [(mean post-SCS PWT of three SCS) – (pre-SCS PWT of the 1st SCS)]/(pre-SCS PWT of the 1st SCS) x 100. At each intensity, we plotted percent change of post-SCS PWT of each animal for different frequency groups, shown as the “Individual %Reversal,” in order to demonstrate the effect of three once-daily SCS sessions on PWT in each animal. Data from animals that received sham stimulation in different studies were combined for analysis. **(B)** The percent change of post-SCS PWT was used to evaluate reduction in mechanical hypersensitivity after three once-daily SCS treatments. We defined rats with a >100% change of post-SCS PWT as responders and those with a value <50% as nonresponders. The proportion of responders, nonresponders, and others in each frequency group is shown. **(C)** The “Group %Reversal” (the averaged Individual %Reversal of each frequency group) was used to compare groups. **(D)** The averaged motor thresholds (MoT) were comparable between the responder and nonresponder groups to different frequencies of SCS at 80% MoT. Data are expressed as mean + SEM.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ versus sham stimulation; † $p < 0.05$ versus 50-Hz.