

Supplementary Information:

Magneto-spinography visualizes electrophysiological activity in the cervical spinal cord

Satoshi Sumiya, MD¹; Shigenori Kawabata, PhD^{*1,2}; Yuko Hoshino, PhD²; Yoshiaki Adachi, PhD³; Kensuke Sekihara, PhD²; Shoji Tomizawa, PhD¹; Masaki Tomori, PhD¹; Senichi Ishii, PhD¹; Kyohei Sakaki, PhD¹; Dai Ukegawa, PhD¹; Shuta Ushio, MD¹; Taishi Watanabe⁴; Atsushi Okawa, PhD¹

Supplementary Figure S1. Schematic illustration of intra-axonal currents (red arrows), volume currents (yellow arrows flowing outside the nerve) and magnetic fields (green arrows) resulting from intra-axonal currents (magnetic fields generated by volume currents are not illustrated here).

Supplementary Video S2. Temporal changes in reconstructed currents of a healthy subject measured after stimulation of the lower thoracic spinal cord. A movie corresponding to Figure 2a.

Supplementary Video S3. Reconstructed currents of the cervical spondylotic myelopathy patient. A movie corresponding to Figure 4a.

Supplementary Video S4. Reconstructed currents after stimulation of the right median nerve at the elbow. A movie corresponding to Figure 6a.

Supplementary figure 1

