# PEG-INDUCED MOTOR RECOVERY IN A CANINE MODEL OF TOTAL SPINAL TRANSECTION

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## ABSTRACT

Complete spinal cord injury is considered unrecoverable. Here we show that dogs whose dorsal cord has been fully transected recover locomotion after immediate treatment with fusogens (Polyethylene Glycol, PEG) within two months. Neurophysiological and DTI MR data confirm electrophysiological and anatomical continuity. This study suggests that a form of spinal cord injury can effectively be treated and points out a way to treat spinal cord injury patients by removing the injured segment and, along with vertebral shortening, reapproximating and fusing the two stumps.