

Activation of three major signaling pathways after endurance training and spinal cord injury

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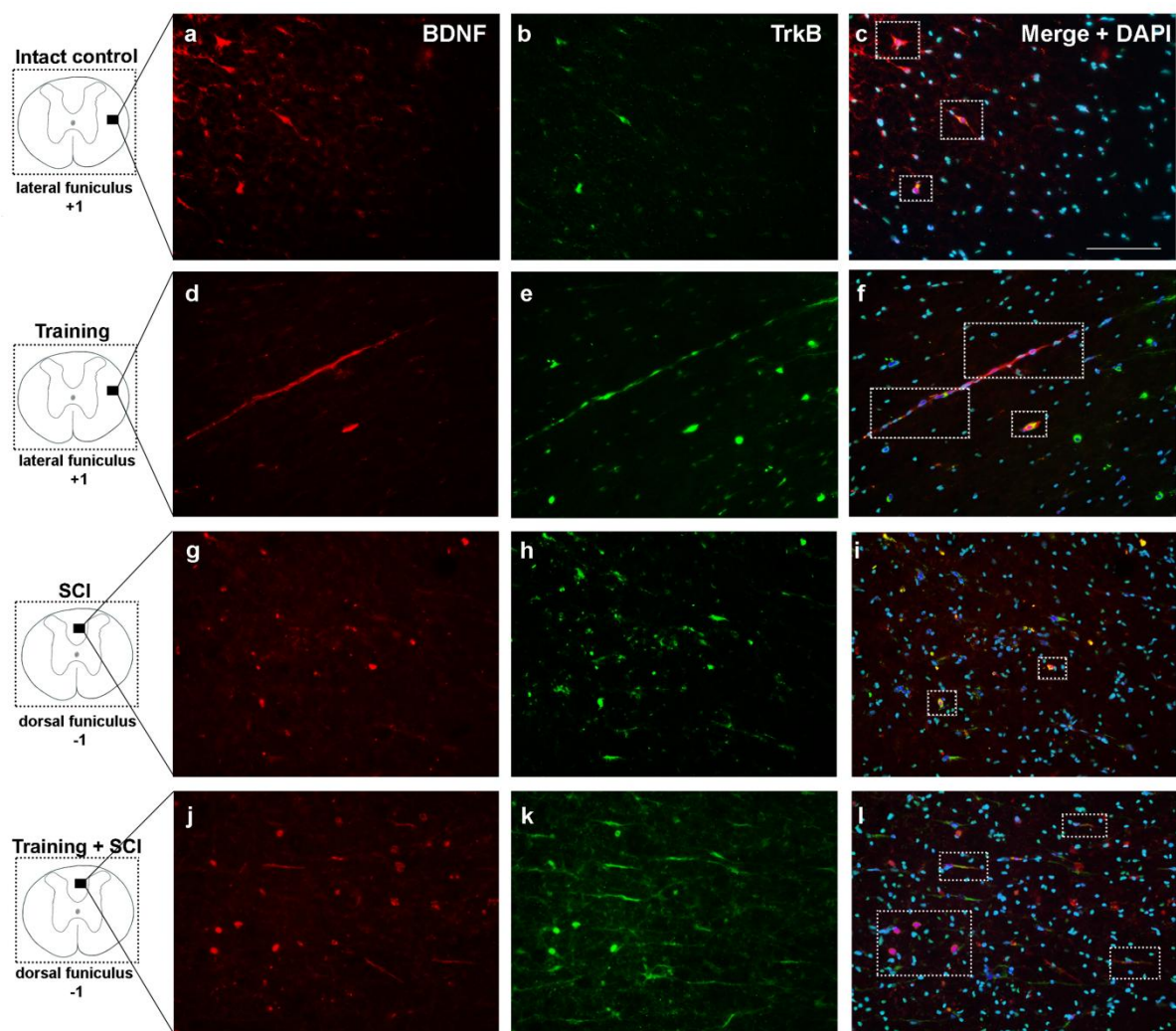


Fig. 1 Microphotographs of BDNF (red) and TrkB (green) in spinal cord segments in intact controls (A-C), after six weeks endurance training (D-F), SCI alone (G-I) and pre-training followed by SCI with six weeks survival (J-L). Fluorescent signals detected in lateral funiculi (intact control and training groups; cranial segments) and in dorsal funiculi (SCI and Training + SCI groups; caudal segments). Overlapping of BDNF-TrkB with DAPI is shown in the third column (Merge + DAPI). Scale bar: 100µm; **BDNF** – brain-derived neurotrophic factor; **TrkB** – tropomyosin-related kinase B; **SCI** – spinal cord injury.

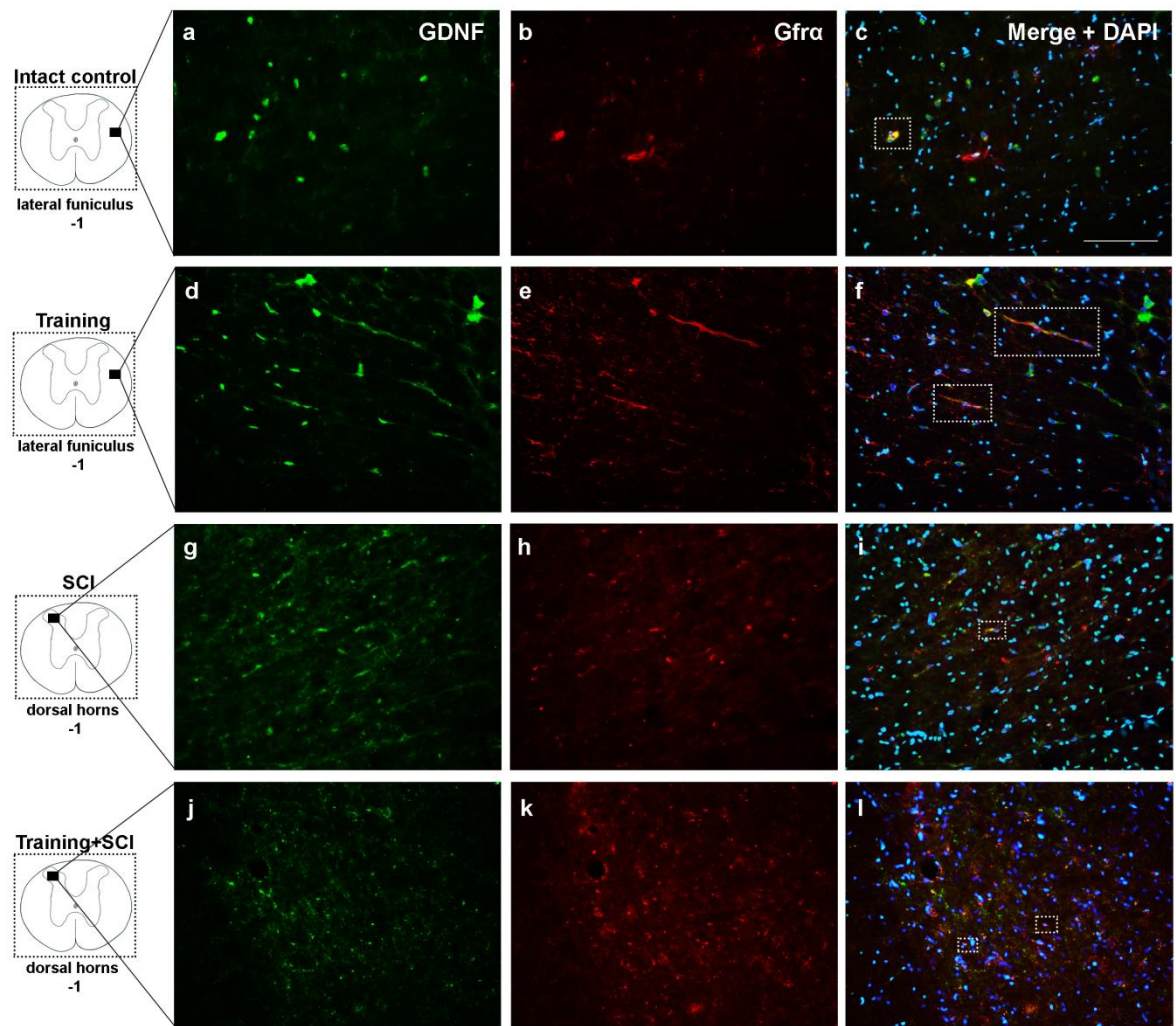


Fig. 2 Representative images showing GDNF (green) and Gfra (red) positivity in spinal cord. Immunolabeling of growth factor and its receptor is shown in the intact control (lateral funiculus; caudal segment; **A-C**); after training (lateral funiculus; caudal segment; **D-F**), SCI alone (lateral funiculus; caudal segment; **G-I**) and Training + SCI group (dorsal horn; caudal segment; **J-L**). Third column shows overlay of fluorescent pictures with DAPI. Scale bar: 100µm; **GDNF** – glial cell-derived neurotrophic factor; **Gfra** - GDNF family receptor alpha; **SCI** – spinal cord injury.