

Supplementary Materials: Cellular Changes in Injured Rat Spinal Cord Following Electrical Brainstem Stimulation

Table S1. List of antibodies and concentrations used.

Antibody	Manufacturer	Host	Dilution
<i>Primary</i>			
BrdU	Novus	Rat	1:100
BrdU	Roche	Mouse	1:100
NeuN	Millipore	Mouse	1:1000
Blbp	Abcam	Rabbit	1:100
Sox2	Santa Cruz	Rabbit	1:500
GFAP	Invitrogen	Rat	1:500
CD68	Millipore	Mouse	1:500
Double cortin	Millipore	Guinea Pig	1:100
APC	Abcam	Mouse	1:500
Arginase-1	Invitrogen	Rat	1:200
iNOS	Novus	Rabbit	1:500
NG2	Millipore	Mouse	1:500
<i>Secondary (488, 594, 647 nm)</i>			
Mouse	Alexa Fluor	Goat	1:10,000
Rabbit	Alexa Fluor	Goat	1:10,000
Rat	Alexa Fluor	Goat	1:10,000

Table S2. Univariate and multivariate regression analyses with all three spinal cord subregions included in analyses. All cell counts are measured at the level of the lesion, without pooling of cell counts from either of the spinal cord subregions. On the left are shown mean ($\pm$ SE) counts for the immune and neuroglial progenitor markers. P values are estimated for individual comparisons using bootstrap analysis. Bolded are regressors with $p < 0.05$. On the right are shown counts of markers co-stained with BrdU. At the bottom of the table are shown the results of multivariate stepwise regression analysis, which yielded a significant model associated with stimulation for the regressors on the left side of the table, but not for those on the right side of the table. Abbreviations: Stim., stimulation; NS, not significant.

Immune/Precursor Cells				Proliferation			
Marker	Control	Stim.	P	Markers	Control	Stim.	P
				BrdU	587 $\pm$ 50	519 $\pm$ 49	NS
CD68	300 $\pm$ 39	224 $\pm$ 28	0.043	CD68/BrdU	88 $\pm$ 20	71 $\pm$ 20	NS
CD68/iNOS	16 $\pm$ 7	30 $\pm$ 10	NS				
CD68/Arg-1	21 $\pm$ 6	36 $\pm$ 11	NS				
GFAP	187 $\pm$ 29	185 $\pm$ 29	NS	GFAP/BrdU	55 $\pm$ 6	67 $\pm$ 10	NS
NG2	181 $\pm$ 41	252 $\pm$ 64	NS	NG2/BrdU	49 $\pm$ 13	59 $\pm$ 17	NS
Sox2	384 $\pm$ 61	250 $\pm$ 42	0.016	Sox2/BrdU	74 $\pm$ 11	64 $\pm$ 4	NS
Blbp	181 $\pm$ 38	349 $\pm$ 67	0.000	Blbp/BrdU	14 $\pm$ 2	22 $\pm$ 6	0.047
Stepwise regression model:				Stepwise regression model:			
NRM LFS $\approx$ Blbp + CD68				N/A			
(F ₂ = 51.3, $p < 0.001$)							