

# Acupuncture Regenerates Nerves

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Acupuncture repairs injured nerves. Findings published in *Neural Regeneration Research* demonstrate that acupuncture causes injured lower and upper limb motor nerves to repair. Electromyographic nerve conduction tests of acupuncture patients with nerve injuries document “an effective response” in 80% of patients participating in the study.



Electromyography confirms that acupuncture significantly improves motor nerve conduction velocity and amplitude and also promotes functional nerve repair.

The researchers made an important discovery. A special set of acupuncture points resulted in good to excellent clinical responses at a very high rate. Using only local acupuncture points, patients had an effective rate of 38.5%. By adding acupuncture points to the Du meridian in addition to local acupuncture points, the effective rate jumped to 80%.

The Du meridian is a pathway composed of 28 primary acupuncture points plus extra acupoints. Many of the Du meridian acupuncture points are located on the midline of the back below the spinous processes of the vertebrae. In Traditional Chinese Medicine (TCM), the application of acupuncture points to the Du meridian (Governor vessel) are used for the treatment of many disorders including spine and brain ailments, vertigo, numbness, tremors, febrile diseases, and infertility.

The research published in *Neural Regeneration Research* confirms the Du meridian's significant role in the treatment of nerve injuries. Electroacupuncture was applied to both the upper and lower limb groups at a rate of once per day, five times per week for a total of six weeks. The total number of acupuncture treatments was 30 sessions per patient. The researchers conclude, "Our results indicate that Governor vessel and local meridian acupoints used simultaneously promote functional repair after peripheral nerve injury."

The acupuncture points used in the study were a protocolized set of two acupuncture point prescriptions, one for the upper limbs and one for the lower limbs. The upper limb acupuncture point prescription consisted of local acupoints at the site of the injured nerve plus the following Du meridian acupoints:

- Baihui (DU20)
- Fengfu (DU16)
- Dazhui (DU14)
- Shenzhu (DU12)

The lower limb acupuncture point prescription consisted of local meridian acupoints at the site of the injured nerve plus the following Du meridian acupoints:

- Jizhong (DU6)
- Mingmen (DU4)
- Yaoyangguan (DU3)
- Yaoshu (DU2)

The local acupuncture points used in the study were chosen based on the area of nerve injury. Radial nerve injuries were treated with the following acupuncture points:

- Jianyu (LI15)
- Binao (LI14)
- Quchi (LI11)
- Hegu (LI4)
- Yangxi (LI5)

Ulnar nerve injuries were treated with the following acupuncture points:

- Qingling (HT2)
- Xiaohai (SI8)
- Zhizheng (SI7)
- Wangu (SI4)

- Houxi (SI3)

Median nerve injuries were treated with the following acupuncture points:

- Quze (PC3)
- Daling (PC7)
- Neiguan (PC6)
- Laogong (PC8)

Peroneal nerve injuries were treated with the following acupuncture points:

- Yanglingquan (GB34)
- Guangming (GB37)
- Juegu (GB39)
- Qiuxu (GB40)

Tibial nerve injuries were treated with the following acupuncture points:

- Yinlingquan (SP9)
- Sanyinjiao (SP6)
- Dijii (SP8)
- Lougu (SP7)

Sciatic nerve injuries were treated with the following acupuncture points:

- Huantiao (GB30)
- Ciliao (BL32)
- Zhibian (BL54)
- Yanglingquan (GB34)
- Weizhong (BL40)
- Juegu (GB39)

Brachial plexus injuries were treated with the following acupuncture points:

- Jianyu (LI15)
- Binao (LI14)
- Quchi (LI11)
- Waiguan (SJ5)
- Baxie (EX-UE8)

The acupuncture needles were 0.35 x 25 mm and were applied to an approximate depth of 1 cun at each acupoint. Manual acupuncture was applied to elicit a response followed by

application of electroacupuncture with a sparse-dense wave between 2 - 100 Hz. Intensity



was set to tolerance levels.

The researchers note that nerve injuries affect the metabolic microenvironment. Citing an example, they note that sciatic nerve injuries reduce acetylcholinesterase activity in the lumbar spinal cord microenvironment. This causes neuronal cell death thereby impeding nerve repair. The researchers note that acupuncture counteracts this effect citing that it successfully increases “acetylcholinesterase expression in spinal cord tissue after peripheral nerve injury.” As a result, the researchers suggest that this may be an important mechanism by which acupuncture promotes the healing of peripheral nerves.

Reference:

Gh, He, Ruan Jw, Zeng Ys, X. Zhou, Y. Ding, and Zhou Gh. "Improvement in acupoint selection for acupuncture of nerves surrounding the injury site: electro-acupuncture with Governor vessel with local meridian acupoints." *Neural Regeneration Research* 10, no. 1 (2015): 128.