

Acupuncture Slows Parkinson Progression, Provides Relief

Acupuncture benefits patients with Parkinson's disease. Researchers discovered that acupuncture helps improve cognitive abilities, emotional stability, and daily living activity scores for patients with Parkinson's disease. By combining scalp acupuncture with standard pharmaceutical medications, patients had significant reductions in post-treatment complications due to adverse effects associated with medication therapy. The researchers confirm that acupuncture combined with conventional medication therapy significantly prevents degradation of cognitive abilities and improves mental and emotional health.



The research team compared two groups in their investigation. Both groups received identical drug therapies commonly used for Parkinson's disease patients. One group received the addition of scalp acupuncture with electrostimulation delivered with an electroacupuncture device. The group receiving only drug therapy

had a 73.3% total treatment effective rate. The group receiving drug therapy plus acupuncture had an 87% total treatment effective rate. The research team of Gu et al. reported the results of the investigation in the *Shanghai Journal of Acupuncture and Moxibustion* in the research paper entitled *Clinical Observations on Combined Treatment of Parkinson's Disease Using Acupuncture and Medicine*.

The researchers used mild reinforcing and reducing manual acupuncture techniques to achieve the clinical results. The primary acupoints administered during the study were the following:

- GB20
- LI11
- LI4
- LV3
- KD3
- GB34
- Motor Line (scalp acupuncture)

The researchers add that the Traditional Chinese Medicine (TCM) diagnosis of liver and kidney yin deficiency is common among Parkinson's disease patients. They note that the addition of acupuncture to standard drug therapy significantly improved the quality of life for the patients. Moreover, the progress of the disease was slowed by the application of acupuncture.

Both groups in the study received the medication Madopar. This has the active ingredients of benserazide and levodopa. For patients receiving acupuncture, deqi was stimulated manually at the acupoints. Bilaterally, the motor line was stimulated with a G6805-2 electroacupuncture device. A continuous wave at 2 Hz was set to patient tolerance levels. Total treatment duration time was 20 minutes per acupuncture session. Treatments were administered weekly for a total of 36 acupuncture sessions per patient.

This confirms the findings of Iseki et al. (Fukushima Medical University), whose case findings determine that acupuncture reduces Parkinson's disease related pain, anxiety, depression, hot flashes, and abnormal sweating. The researchers used Seirin brand acupuncture needles at the following acupoints, using manual stimulation:

- LV3
- LI4
- KD5
- KD7
- SP6
- GB34
- BL18
- BL15
- GB20

Electroacupuncture was applied to relax muscle tension and rigidity with a 1 Hz frequency for 7 minutes at the following acupoints:

- KD10
- LV9
- BL23
- BL25

In the case study, depression and anxiety scores improved significantly. Also, the patient "steps became larger" and bradykinesia was greatly reduced. Bradykinesia is a slowness of movement characteristic of Parkinson's disease.

In the USA, University of Arizona researchers confirm that acupuncture improves the balance and gait for patients with Parkinson's disease. Published in *Neurology* (the journal of the American Academy of Neurology), Lei et al. confirm that acupuncture improves balance by 31%, gait speed by 10%, and stride length by 5%. The study used rigorous sham controls and determined that only true acupuncture delivers the clinical results. This eliminated any concerns that a placebo effect may have influenced the results. The doctors from the surgery and neurology departments at the University of Arizona conclude that "EA (electroacupuncture) is an effective therapy in improving certain aspects of balance and gait disorders in PD (Parkinson's disease)."

Researchers from the *Research Group of Pain and Neuroscience* at Kyung Hee University (Seoul, Republic of Korea) have discovered how acupuncture benefits brain chemistry for patients with Parkinson's disease. The application of two acupuncture points (LV3, GB34) inhibits decreases of tyrosine hydroxylase in nigrostriatal dopaminergic neurons. Tyrosine hydroxylase is a brain protecting enzyme that assists in the creation of L-DOPA, which is an important dopamine precursor. The researchers determined that LV3 and GB34 prevent decreases of L-DOPA in the thalamic portions of the brain. This helps in the protection of motor functions in Parkinson's disease patients.

Dr. Xibin Liang, PhD combined efforts with Wang et al. in research entitled *The Antioxidative Effect of Electro-Acupuncture in a Mouse Model of Parkinson's Disease* and determined that acupuncture protects the brain by creating antioxidative and antiapoptosis effects. Dr. Liang received his postdoctoral training at UCLA (Los Angeles, California) and Johns Hopkins

University (Baltimore, Maryland). He is currently working at the Steinberg Lab at Stanford University (Stanford, California) investigating neural stem cell treatments for stroke injuries to the brain.

The discovery by the researchers that acupuncture stimulates homeostatic antioxidative and antiapoptosis effects demonstrates that acupuncture provides neuroprotection, especially in the substantia nigra. This is the area of the brain that supplies the basal ganglia (which controls motor actions) with dopamine. As a result, the research indicates that Parkinson's disease patients are well served by the neuroprotective effects of acupuncture.

Yeo et al. used fMRIs to confirm that acupuncture re-activates brain centers suffering from excess deactivation in Parkinson's disease patients. In a controlled experiment, it was shown that needling acupoint GB34 "may be helpful in the treatment of symptoms involving PD (Parkinson's Disease)." Application of needling to GB34 re-activated several areas of the brain: substantia nigra, caudate, thalamus, putamen.

Qiu et al. confirm that acupuncture benefits Parkinson's patients in a meta-analysis. The works of Zhou Sha and Yuan Yin et al. were included in the comprehensive review. Both investigations examined the **Lu Di Seven Point Combination**. This combined three bilateral acupoints with one singular point:

- GV15
- GB20
- SI4
- ST25

Both investigations reveal that acupuncture improves physical, behavioral, and mental indices for patients with Parkinson's disease. Ren Xiaoming et al. demonstrated improvements by needling the following acupoints:

- BL18
- BL23
- GB20
- LI11
- LI4
- GB34
- KD3
- LV3

Yao Xiaoping conducted a comparison of patients receiving only levodopa with patients receiving levodopa and acupuncture. Using only levodopa, patients had a 66.7% total effective rate. However, the combination of levodopa and acupuncture produced a 93.3% total effective rate. Improvements were seen across many clinical variables including facial expressions, posture, linguistic abilities, pace, dyskinesia, shaking, and rigidity.

In the meta-analysis, Deng Xianbin et al. demonstrated that moxibustion is useful for the relief of myotonia, which is the lack of ability to relax voluntary muscles after effort. The primary acupoints receiving moxibustion included the following:

- CV12
- CV6
- CV4
- BL19
- BL17
- DU4

Traditional Chinese Medicine (TCM) includes acupuncture, qi gong, tai ji quan, moxibustion, herbal medicine, and more. Researchers find herbal medicine effective for the alleviation of Parkinson's disease complications. In research published in *Progress in Neuro-Psychopharmacology and Biological Psychiatry* (Shiman School of Medicine), it was found that the herbal formula Yi Gan San provides neuroprotection in an induced Parkinsonian mouse model. The study concludes that "in the mouse Parkinson's disease model, treatment with Yi-Gan San also significantly improved motor functioning and prevented dopaminergic loss."

The evidence across multiple studies suggests that patients with Parkinson's disease are best served with integrative medicine including acupuncture and other TCM modalities. Acupuncture demonstrates the ability to reduce adverse effects associated with medications. In addition, acupuncture and TCM modalities demonstrate the ability to improve motor abilities and cognitive function.

Reference: <http://www.healthcmi.com/Acupuncture-Continuing-Education-News/1692-acupuncture-slow-parkinson>

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