Tuina Therapy as Novel Therapeutic Strategy for Neurodegenerative Diseases

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1. Spasticity and rigidity in MS, PD, Stroke patients

Spasticity and rigidity are detrimental as they impair sense of wellness in Multiple Sclerosis (MS), stroke and Parkinson’s disease (PD). They lead to pronounced gait and mobility impairment.

2. Disease Neurologic Model for Multiple Sclerosis

MS is a heterogeneous, autoimmune, inflammatory and neurodegenerative disease of CNS. Its course is invariable, depending on 50% primary progressive, 25% secondary progressive, and 25% relapsing remitting. Primary progressive transitioning to secondary Progressive Disease after 10-15 years (Leible & Ravidal, 1996). Symptoms include optic neuritis with visual field defects, diplopia, dysarthria, ataxia, spasticity, urinary and bowel incontinence, and gait instability. Permanent sequelae is invariable.

3. Disease Neurologic Model for Parkinson’s Disease

PD is an α-synucleinopathy and neurodegenerative disorder affecting 5% of elderly, and even 3% of young adults, the cortex, and most notably the substantia nigra pars compacta (Lowe et al., 1997). Symptoms include bradykinesia, tremor, postural instability, and rigidity.

4. Pharmaceuticals Offer Multiple Relief to Spasticity & Rigidity

Sporadic symptoms include: (i) Kinking (i.e., CCAAs), spasticity treatment; (ii) 5-ht2a-antagonists and 5-ht2b-antagonists. These drugs have been shown to reduce spasticity, muscle tone, spasticity, and hyperreflexia.

5. History of Tuina Therapy in traditional Chinese Medicine

Tuina therapy is a Chinese physical and massage therapy. Its medical use was first recorded in an oracle bone dated 15,000 years old. The oldest existing medical texts from 2000 years old, were silk rolls, called the Fifty Two Treatises. It was not until the 21st century that Tuina therapy was discovered in an ancient tomb (Ma Zhaoqing Du). It describes Tuina use for various branches of Chinese medicine.

6. Practice of Tuina Therapy

- Tuina therapy consists of simple therapeutic gestures.
-Tuina therapy is broader and stronger that after type of physical therapy.
- During the treatment, patients will experience more rapid and effective results. It can last for 1 to 2 days for deep relaxation.
- At Chi Wellness Clinic, most patients do not take any medications. Tuina Therapy work over few weeks, but some patients do follow-up sessions.

7. Case: L. Multiple Sclerosis

- Case L. is 80-year-old gentleman who works as a home-based software engineer.
- He has a 22-year history of MS, resulting in multiple sclerosis disease, moderate spasticity, parkinsonism, and ataxia.
- Treatment: Repetitive hand, wrist, and finger movements on the patient’s affected limbs resulted in significant improvement of his sense of wellness, motor function, and quality of life.

8. Case 2: Effects of Tuina Therapy for MS

- A 39-year-old woman with secondary progressive MS who received 10 sessions of Tuina therapy over a 6-week period, resulted in significant improvement of spasticity, and gait instability.
- Treatment: Regular Tuina therapy resulted in significant improvement of spasticity, and gait instability.

9. Case 3: Parkinson’s Disease

- A 68-year-old man with advanced Parkinson’s disease, who received 12 sessions of Tuina therapy over a 6-week period, resulted in significant improvement of spasticity and gait instability.
- Treatment: Regular Tuina therapy resulted in significant improvement of spasticity and gait instability.

10. Hypothesis for the Effects of Tuina Therapy on Spasticity and Rigidity

Spasticity is a complex motor disorder characterized by increased muscle tone and exaggerated movements. Tuina therapy can reduce spasticity and rigidity.

11. Summary

- We present our case studies of patients treated with Tuina therapy for advanced PD and MS. Significant improvement of spasticity and rigidity was shown.
- In conclusion, Tuina therapy is a simple, effective, and safe treatment for spasticity and rigidity in neurodegenerative diseases.

12. Future Perspective

- In conclusion, we recommend more research on Tuina therapy for advanced PD and MS.

13. References