Acupuncture Heals Tennis Elbow, Stops Pain

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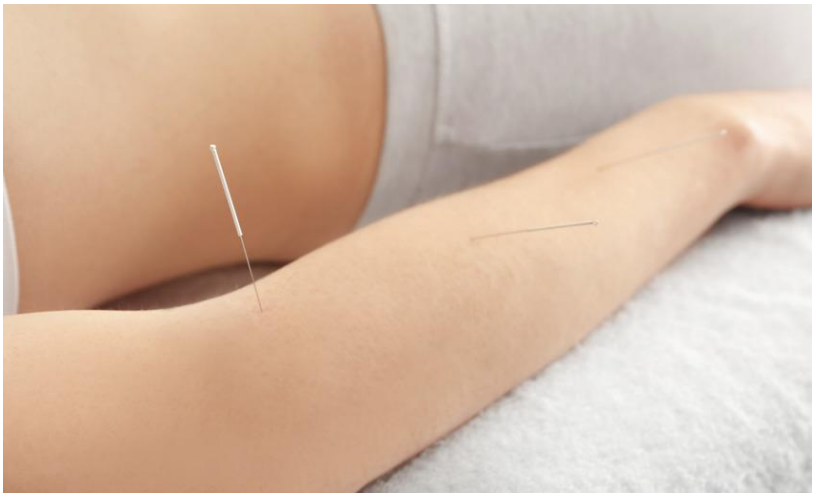

Acupuncture is a proven and effective therapeutic method for the alleviation of tennis elbow (lateral epicondylitis). Hubei Hanjiang Hospital researchers compared two Traditional Chinese Medicine (TCM) protocols. [1] One group used acupuncture plus moxa. The other group used electroacupuncture and rehabilitation training. Both treatment protocols were effective, with the second protocol outperforming the first. Let's take a look at the results.

About Lateral Epicondylitis

Tennis elbow is a chronic aseptic inflammatory condition involving the muscles and tendons of the forearm. The origin of the extensor carpi ulnaris (muscle and tendon) becomes weakened or damaged from overuse or trauma. Tennis elbow is marked by pain on the outside of the elbow. The pain on the lateral aspect of the olecranon worsens with gripping and when the forearm in the pronated/extension position (such as twisting towels and sweeping floors). Tennis elbow patients in the early stages usually have tenderness on the outer elbow. In severe cases, pain can seriously affect the patient's daily activities and quality of life.

Results

Electroacupuncture plus rehabilitation training achieved a total treatment effective rate of 90.0%. Using warm needle acupuncture (acupuncture plus moxibustion), the total treatment effective rate was 76.7%. Electroacupuncture plus rehabilitation training outperformed warm acupuncture by 13.3%.

The electroacupuncture plus rehabilitation training group recorded a mean Mayo Elbow Performance Score (MEPS) of 6.56 ±2.15 before treatment and 4.41 ±1.68 after treatment, signaling a significant improvement in elbow function ($P<0.05$). By contrast, the warm needle acupuncture group recorded a mean MEPS of 6.64 ±1.98 before treatment and 5.39 ±1.85 after treatment, presenting a less significant improvement in elbow function ($P<0.05$).

A total of 60 tennis elbow patients from Hubei Hanjiang Hospital were treated and evaluated. They were randomly divided into two groups of 30, the integrated treatment group and the warm needle acupuncture control group. Both groups received treatment on identical acupoints.

Both groups were equivalent in all relevant demographics ($P>0.05$). For the control group, there were 17 males, 13 females, the mean age was 38.6 ± 6.24 years, and the mean illness duration was 7.69 ±5.12 months. For the treatment group, there were 16 males, 14 females, the mean age was 39.4 ±7.15 years, and the mean illness duration was 7.91 ±4.87 months. The following primary acupoints were selected for all patients:

- LI10 (Shousanli)
- LI11 (Quchi)
- LI13 (Shouwuli)
- Ashi points (points of tenderness)

After disinfection of the acupoint sites, a 0.38 mm x 40–50 mm needle was inserted into each acupoint. Upon achieving deqi, the needles were manipulated with the mild reinforcement and attenuation (Ping Bu Ping Xie) technique. One acupuncture session was conducted daily. Each treatment course consisted of 6 acupuncture sessions followed by a one day break before the next course began. All patients received 4 treatment courses in total.

For the warm acupuncture group, an approximately 2 cm moxa roll was attached to the end of each needle and ignited. The skin surrounding the acupoints was covered with custom-made cards to prevent falling moxa ashes from irritating the skin. A 30-minute needle retention time was observed.

For the electroacupuncture plus rehabilitation training group, a G－6805II electrotherapy device was connected to Shousanli (LI10) and Ashi points. A disperse-dense wave was applied with an intensity level set to patient tolerance levels. Electroacupuncture was applied once per day with 30 minutes allocated for each acupuncture session. The specific protocol used for rehabilitation training is as follows:

- Relaxing exercise: Patients were asked to make movements that contract the forearm muscle and induce pain. When the pain becomes intolerable, patients were asked to move back and relax the muscle. This exercise was repeated several times.
- Passive stretching exercise: Exercise commenced with patients in a seated and relaxed position. The elbow and the palm on the affected side were held by the therapist. The patient's elbow was fixed, but the wrist was then gently flexed to stretch the forearm muscle. The position was kept until patients felt the muscle stretching. This exercise was repeated several times.
- Active resistance exercise: Patients were asked to contract the muscles on the affected forearm both statically or dynamically with the therapist resisting the movement. This exercise was repeated several times.

The results indicate that acupuncture is effective for the alleviation of tennis elbow. Electroacupuncture and rehabilitation training produced significant total effective rates and better improvement of elbow function recorded by MEPS. Based on the data, the researchers find electroacupuncture plus rehabilitation training are optimally effective for the treatment of tennis elbow.

Shanghai Sixth People's Hospital

The above research is not an isolated finding. Shanghai Sixth People's Hospital researchers (Wu et al.) performed a literature review of independent tennis elbow clinical trials, most of which made extensive use of acupuncture, electroacupuncture, and moxibustion for the treatment of tennis elbow. [2] Based on the data, the researchers determined that acupuncture, electroacupuncture, and moxibustion are effective for the alleviation of tennis elbow. The following are some of the studies included in the literature review.

Distal Acupuncture

Zeng et al. found a distal acupoint especially effective for the alleviation of tennis elbow. [3] They performed a clinical trial involving 42 patients with tennis elbow. The acupoint Sanjian (LI3) was needled on the affected elbow region. When the hand in a loose fist, this acupoint is located on the skin retraction behind the head of the 2nd metacarpal bone.

Upon disinfection, a 0.30 mm x 40 mm needle was swiftly inserted into the acupoint, reaching a depth of 13 – 20 mm. After achieving a deqi sensation, the needle was lifted, thrust, and rotated for one minute to produce a strong stimulation. This manipulation was administered every 5 minutes. A total of a 20-minute needle retention time was observed. One acupuncture session was conducted per day, 3 days per week. The total treatment period spanned 1 month. Needling LI3 achieved a total effective rate of 97.6%.

Electroacupuncture

Liu et al. found electroacupuncture effective for alleviating tennis elbow. [4] Researchers from the First Affiliated Hospital of Heilongjiang Traditional Chinese Medicine University randomly divided 60 tennis elbow patients into an electroacupuncture treatment group and a conventional acupuncture control group. Both groups received acupuncture treatments on identical acupoints:

- Quchi (LI11)
- Shousanli (LI10)
- Waiguan (TE5)
- Hegu (LI4)
- Ashi points

For the treatment group, a disperse-dense wave was applied with an electroacupuncture device for 20 minutes per session. One acupuncture session was conducted daily. Each treatment course consisted of 10 treatment sessions, followed by a 2-day break. All patients received 2 treatment courses in total.

The results were assessed after the completion of all treatments. The electroacupuncture group achieved a total effective rate of 93.3% and the manual acupuncture only group had an 83.3% effective rate. The addition of electric stimulation to conventional acupuncture increases the total effective rate by 10.0%.

Moxibustion

Zhou et al. documented that acupuncture plus moxa outperformed acupuncture plus the TDP heat lamp for tennis elbow pain relief. [5] A total of 60 tennis elbow patients from Xian First People's Hospital were treated and evaluated. They were randomly divided into two groups, the acupuncture plus moxa group (n=31) and the acupuncture plus TDP group (n=30). Acupuncture plus moxa produced a total effective rate of 80.65%. By contrast, acupuncture plus TDP produced a total effective rate of 55.17%.

Conclusion

Acupuncture produces significant positive patient outcome rates for patients with tennis elbow. The data indicates that access to conventional acupuncture, moxibustion, and electroacupuncture is an adequate solution for the vast majority of patients. To learn more, contact a local acupuncturist about treatment options.

References

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