

Clinical Study Of Fascia Decompression Technique By Using Acupotomy (Zhendao) On Chronic Exertional Compartment Syndrome: A Prospective Study in 80 Patients

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Patients with chronic exertional compartment syndrome have pain during exercise that usually subsides at rest. History and physical examination may raise suspicion of the syndrome; diagnosis is usually confirmed with intracompartmental pressure measurement after exercise. Acupotomy is acupuncture-like device with the blade of 0.8mm in end.

Hypothesis: Fascia decompression technique by using acupotomy, can relieves these chronic exertional compartment symptoms by cut into these compartments.

Methods: Patients were enrolled if there was clinical suspicion of chronic exertional compartment syndrome, and acupotomy was performed based on this suspicion. Before acupotomy treatment, intracompartmental pressure were collected during and after exercise on a treadmill. Intracompartmental pressure values were recorded in the same manner after acupotomy. Acupotomy treatment can relieves these chronic exertional compartment symptoms by cut into these compartments.

Results: Eighty patients (120 legs) participated in the pre acupotomy visit; 5 refused acupotomy; 3 were lost to follow-up. Of 72 patients who completed the acupotomy visit, the diagnosis of chronic exertional compartment syndrome was retrospectively confirmed in 68 patients and discarded in 4 patients. The intracompartmental pressure is significantly reduced after acupotomy

treatment.

Conclusion: Acupotomy is an effective and convenient method for treating chronic exertional compartment syndrome.

Keywords: chronic exertional compartment syndrome (CECS); intracompartmental pressure (ICP); Acupotomy (Zhendao).