



Wen-Long Hu

Kaohsiung Chang Gung Memorial Hospital

Laser acupuncture therapy for temporomandibular disorders

Objective: To investigate the clinical effects of laser acupuncture therapy for temporomandibular disorders (TMD) after ineffective previous treatments.

Methods: A retrospective observational study was conducted in 29 treatment-resistant TMD patients (25 women, 4 men; age range 17–67 years). Subjects were treated 3 times per week for 4 weeks with the Handylaser Trion (GaAlAs laser diode, 810 nm, 150 mW, pulsed waves), which delivered 0.375 J of energy (5 s) to ST7, ST6, and LI4 and 3 J (40 s) to each Ashi point, 7.5–26.25 J/cm² in total. The visual analog scale (VAS) and maximal mouth opening (MMO) were evaluated before and after treatment.

Results: VAS analysis showed that the patients were free of pain at rest (endpoint) after 5.90±6.08 sessions of laser acupuncture for acute TMD and after 16.21±17.98 sessions for chronic TMD. The VAS score on palpation of the temporomandibular joint reduced to 0.30±0.67 for patients with acute TMD (p=0.005) and to 0.47±0.84 for those with chronic TMD (p<0.001). The MMO significantly increased in patients with acute TMD (7.80±5.43 mm, p=0.008) and in patients with chronic TMD (15.58±7.87 mm, p<0.001).

Conclusions: Our patients suffering from treatment-resistant TMD symptoms improved after laser acupuncture therapy. Long-term follow-up and further studies with a larger patient sample and an appropriate design are needed to examine the efficacy.

Biography

Wen-Long Hu is the Vice Director of the Department of Chinese Medicine at Kaohsiung Chang Gung Memorial Hospital, Assistant Professor at Fooyin University, Kaohsiung Medical University, and Chang Gung University. He has the experiences of clinical practice in low level laser therapy (LLLT) for 20 years and in acupuncture for 25 years. He is invited speaker for lectures in LLLT at many symposiums held by some medical associations. Recently, he is invited to instruct physicians to practice LLLT in workshops. He is also involved in researches in LLLT and acupuncture, e.g. obesity, metabolic syndrome, stroke, dementia, Parkinsonism, myofascial pain, arthralgia, radiculopathy, autism, etc.

wolonghu@gmail.com