

Other Clinical Papers

Acupuncture anaesthesia in inguinal hernia repair (n=12)

Chu DW, Lee DT, Chan TT, Chow TL, Que MB, Kwok SP. Acupuncture anaesthesia in inguinal hernia repair. *ANZ J Surg* 2003;73(3):125-7.

Summary

This study was undertaken to evaluate the efficacy of acupuncture anaesthesia in inguinal hernia repair. Twelve patients with non-recurrent inguinal hernia had Lichtenstein mesh repair under acupuncture anaesthesia. Selected acupuncture loci were stimulated with fine needles connected to low frequency current. Supplementary local anaesthetic was given when required. Four (33%) patients reported satisfactory analgesic effect throughout the operation without need for additional medication, eight (67%) patients experienced mild discomfort during the operation requiring 1-4 mL of 1% lignocaine injection. Blood pressure and heart rate were stable during the procedure. All patients were able to sit up and resume their diet immediately post-operatively. All but one of the patients were discharged on day one after the procedure, with no early or late complications reported. Most patients were satisfied with the analgesic effect of acupuncture anaesthesia. The authors concluded that acupuncture anaesthesia is a feasible anaesthetic option. It reduces the amount of local anaesthetic required, and thus the associated potential complications. It is effective in pain relief and inhibiting gastrointestinal upset. Postoperative recovery was rapid and complication free

Comment

This is a small case series of acupuncture used for acute surgical analgesia. When acupuncture is used as the sole or principal agent for surgical analgesia in an awake patient, the technique is often referred to as acupuncture anaesthesia. Even though acupuncture does not act as an anaesthetic agent, it is sometimes used, as in this case series, to take the place of an anaesthetic.

Patients were premedicated with a small dose of pethidine (25mg) and diazepam (5mg). Electro-acupuncture (EA) at 4Hz was performed on the side of the hernia for 15 minutes prior to the surgery. The pairs of points used were ST36 and SP6, GB27 and 28, KI13 and 14, and paraincisional points. The latter points were needled using 3cm needles, but all the rest were needled using 1cm needles. With the exception of ST36 and SP6, all the needles were removed just before surgery.

Four of the patients required no local anaesthetic and were pain free throughout the procedure. The average quantity of lignocaine used was only 1.4ml of 1%. It is not clear whether this was the mean requirement of all 12, or whether it was only those eight who required it. Either way, it is a very small quantity compared with the usual volume used in this type of surgery.

The doses of premedication were unlikely to result in sufficient analgesia alone to perform surgery. There are no details of the patients' weights in the paper, but it is unlikely that they were so small that 25mg of pethadine and 5mg of diazepam would have been sufficient to cover surgery.

'Electrical acupuncture therapy' for patients with spinal cord injuries (n=100)

Wong AM, Leong CP, Su TY, Yu SW, Tsai WC, Chen CP. Clinical trial of acupuncture for patients with spinal cord injuries. *Am J Phys Med Rehabil* 2003;82(1):21-7.

Summary

The objective of this study was to examine whether electrical acupuncture therapy through

adhesive surface electrodes and concomitant auricular acupuncture therapy could improve the neurologic or functional recovery in acute traumatic spinal cord injury patients. A total of 100 acute traumatic spinal cord injury patients with American Spinal Injury Association (ASIA) impairment grading of A and B were recruited into this study. They were randomly divided into acupuncture and control groups. In the acupuncture group, electrical acupuncture therapy

via the adhesive surface electrodes was applied to bilateral *Hou Hsi* (SI3) and *Shen Mo* (BL62) acupoints. In auricular acupuncture, four acupoints related to the spinal cord were selected for stimulation at the antihelix, helix, and lower portion of the ear-back areas. Acupuncture therapy was initiated early in the emergency room setting or soon after spinal surgical intervention. Rehabilitation therapy was also provided to the patients during acupuncture therapy. In the control group, only rehabilitation therapy was provided to the patients. Neurologic and functional scores were assessed during the time of admission, hospital discharge, and one year post injury. There were significant improvements in neurologic (sensory and motor), and functional scores in the acupuncture group compared with the initial admission period when assessed during the time of hospital discharge and one year post injury. A greater percentage of patients in the acupuncture group recovered to a higher ASIA impairment grading. The authors concluded that the use of concomitant auricular and electrical acupuncture therapies, when implemented early in acute spinal cord injury, can contribute to significant neurologic and functional recoveries.

Comment

The 'electrical acupuncture' used in this study was

really TENS at 75Hz, 200µsec (pulse width) and 10mA. It was applied five times per week, presumably until discharge from the unit. Auricular acupuncture involved the placement of indwelling needles that were replaced weekly.

This is an encouraging trial, however, as there was no sham intervention, it is not possible to determine which aspects of the intervention were responsible for the observed effects. The latter may have derived entirely from the extra attention devoted to the patients in the acupuncture group. It probably would have been fairly easy to design a credible sham, and, in view of the results of Johansson et al,¹ a sham control ought to be used in any further trials of this nature. Johansson et al found that sham TENS was as effective as real TENS or electroacupuncture in the rehabilitation after hemiplegic stroke. It is notable that this trial is not referred to in this paper, whereas there is a reference to a positive trial of 'electrical acupuncture therapy' in stroke rehabilitation by the first author. This could be interpreted as selective citation.

Reference

1. Johansson BB, Haker E, von Arbin M, Britton M, Langstrom G, Terent A *et al.* Acupuncture and transcutaneous nerve stimulation in stroke rehabilitation: a randomized, controlled trial. *Stroke* 2001;32(3):707-13.

Percutaneous tibial nerve stimulation in chronic pelvic pain (n=33)

Van Balken MR, Vandoninck V, Messelink BJ, Vergunst H, Heesakkers JP, Debruyne FM *et al.* Percutaneous tibial nerve stimulation as neuromodulative treatment of chronic pelvic pain. *Eur Urol* 2003;43(2):158-63.

Summary

Neuromodulative therapies have been used with moderate success in patients with chronic pelvic pain. Intermittent Percutaneous Tibial Nerve Stimulation (PTNS) is a 'new' [according to the authors] minimally invasive treatment option, which has been shown to significantly decrease accompanying pain complaints in patients with lower urinary tract dysfunction, such as urge incontinence or urgency/frequency. In this study, the authors evaluated the objective results of

PTNS in patients with chronic pelvic pain as their main complaint. In a prospective multicentre trial PTNS was evaluated in 33 patients with chronic pelvic pain. Effects were recorded by worst visual analogue score (VAS) for pain in daily diaries, the McGill pain questionnaire and the SF-36 general quality of life questionnaire at baseline and after 12 weeks of treatment. Subjective (patients' request to continue chronic treatment to keep the obtained success) and objective responses (decrease in mean VAS >50% and VAS <3 after treatment) were evaluated. A subjective response was seen in 42% of all patients. In seven patients (21%) mean VAS decreased >50%, in six cases (18%) the decrease was >25%. After 12 weeks of treatment, seven patients (21%) ended up with a mean VAS <3. In all patients quality of life (SF-36) significantly improved, as did the total pain rate intensity (McGill). Despite very modest

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