

Electro-acupuncture for Postsurgical Pain Relief

abstracted & translated by

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In issue #1, 2003 of the *An Hui Zhong Yi Lin Chuang Za Zhi (Clinical Journal of Anhui Chinese Medicine)*, Li Hong-li *et al.* published an article titled, "A Clinical Audit of the Effects of Electro-acupuncture on Settling Pain & Restoring Gastro-intestinal Function After Abdominal Surgery." This article appeared on pages 18 and 19 of that journal. A precis of its main points is given below.

Cohort description:

One hundred patients who had recently undergone intra-abdominal surgery were randomly divided into two groups of 50 patients each, a treatment group and a comparison group. In the treatment group, there were 34 males and 16 females 8-85 years in age. Twenty-six of these had had gastro-intestinal surgery, 20 had had liver-gallbladder surgery, and four had had spleen-pancreas surgery. In the comparison group, there were 31 males and 19 females 10-84 years of age. Twenty-seven of these had had gastro-intestinal surgery, 20 had had liver-gallbladder surgery, and three had had spleen-pancreas surgery. Therefore, there was no significant statistical differences between these two groups in terms of sex, age, or type of surgery.

Treatment method:

Members of the comparison group received standard postoperative treatment with IV supplemental fluids, electrolytes, vitamins, antibiotics, and IV feeding. Members of the treatment group received the same basic Western medical postoperative care plus electro-acupuncture beginning six hours after surgery and carried out three times per day for 30 minutes each time. Continuous wave, light to moderate stimulation and supplementing method were used initially. After marked reduction in pain, dense wave, moderate stimulation was used. The main points chosen consisted of: *Zu San Li* (St 36), *Shou San Li* (LI 10), and *Nei Guan* (Per 6). If there had been gastro-intestinal, pancreas, or gallbladder surgery, these were combined with *Guan Yuan* (CV 4) and *Tian Shu* (St 25). If there was liver-gallbladder surgery, they were combined with *Dan Nang Xue* (M-LE-23), *Gan Shu* (Bl 18), and *Dan Shu* (Bl 19).

Treatment outcomes:

In terms of grading pain, no pain equaled a value of 0, 1-3 equaled light pain, 4-6 equaled moderate pain, and 7-10 equaled heavy pain. In terms of recovery of normal intestinal noises, hearing such noises 4-5 times per minutes was considered normal. Based on these criteria, in the treatment group 12 hours after surgery, 10 patients (20%) were pain-free, 34 (68%) had light pain, five (10%) had moderate pain, and one (2%) had heavy pain. In the comparison group, four were pain-free (8%), six (12%) had light pain, 33 (66%) had moderate pain, and seven (14%) had heavy pain. In the treatment group the mean time to return of first intestinal noises was 22.60 ± 3.48 hours after surgery, while in the comparison group, the mean time was 29.41 ± 2.82 hours after surgery. Mean time till return to normal of intestinal noises in the treatment group was 38.75 ± 6.84 hours after surgery, while in the comparison group it was 49.14 ± 11.64 hours after surgery. In terms of mean time for first passage of gas after surgery, this occurred at 36.65 ± 5.24 hours after surgery in the treatment group and at 47.25 ± 10.62 hours after surgery in the comparison group. And finally, in terms of mean time of first passage of stools after surgery, this occurred at 46.54 ± 7.92 hours after surgery in the treatment group and at 57.43 ± 11.64 hours after surgery in the comparison

group. Therefore, this study suggests that the addition of this electro-acupuncture protocol can decrease postoperative pain and speed recovery of gastro-intestinal function when combined with standard Western medical postoperative care.

Discussion:

According to the Chinese authors, anesthesia and intra-abdominal surgery can cause loss of regulation of the viscera and bowel qi mechanism movement and transformation. Hence the function of conduction and transformation is stopped and stagnant. In Drs. Li *et al.*'s protocol, the main points are on the yang ming channels while the auxiliary points link with the small intestine and liver-gallbladder. The *Ling Shu (Spiritual Axis)* says "If the intestines and center are not defecating, choose *San Li*. If replete, drain it; if vacuous, supplement it... If the stomach qi counterflows leading to vomiting bitter [fluid], what is called vomiting bile, choose *San Li* to descend stomach qi counterflow." The *Xi Hong Fu (The Poem of the Grand Feast)* says: "[When one] needles hand and foot, upper and lower *San Li*, food glomus and qi lumps are dependably dispersed." In fact, the combination of *Zu San Li* and *Shou San Li* does have a very marked effect of regulating and rectifying the gastro-intestinal tract. Both these points pertain to the yang ming channel and both control the absorption of food and drink, dispersing and transforming, conducting and abducting. Hence they are able to treat all diseases of the upper, middle, and lower abdominal regions. *Zu San Li* has a propensity for regulating the stomach function, while *Shou San Li* heavily regulates the intestinal function. *Nei Guan* is one of the eight extraordinary vessel meeting points. It is able to diffuse and free the flow of the qi mechanism of the upper and middle burners. It also functions well for stopping pain. As the *Biao You Fu (The Poem of the Secret Sign)* says, "[For] chest and abdominal fullness and pain, puncture *Nei Guan*." *Tian Shu* is the *mu* or alarm point of the hand yang ming (*i.e.*, large intestine), while *Guan Yuan* is the *mu* or alarm point of the hand tai yang small intestine. Alarm points are where the channel qi of the viscera and bowels gather and collect and, therefore, can treat diseases of the corresponding viscera and bowels. *Gan Shu*, *Dan Shu*, and *Dan Nang Xue* are all beneficial for restoring the gallbladder tract function postoperatively. As the *Qian Jin Fang (Formulas [Worth] a Thousand [Pieces of] Gold)* says, "*Gan Shu*... rules bilateral rib-side tension and pain. *Dan Shu*... governs rib-side pain and inability to lie down [or sleep]." As this study shows, electro-acupuncture is effective for settling postoperative abdominal pain and it is also effective for restoring gastro-intestinal function earlier than usual by stimulating peristalsis.

Honora's comments

Since more and more acupuncturists are working in Western medical environments, it seems useful for there to be more information about working with post-operative patients. In looking at the above protocol for gastro-intestinal surgery patients, there is nothing particularly unusual here. That being said, I basically like this formula because it reminds me of the work of Dr. Wang Le-ting's Old Ten Needles and Ma Dan-yang's Twelve Heavenly Star Points, which are excellent treatments for a wide variety of ills, including all types of digestive disorders. Both of these historically important doctors used *San Li*, *Nei Guan*, and *Guan Yuan* in their treatments. Wang Le-ting also used *Tian Shu*. I also like the choice of *Dan Nang Xue*, especially if it is tender to pressure. However, I personally would not choose points that are on the back. When someone has had abdominal surgery, it can be difficult and painful to turn them over or even sit them upright at first. Therefore, instead of the two back *shu* points, one could choose *Zhang Men*, (Liv 13) and/or *Yang Ling Quan* (GB 34) in order to rectify the qi of the liver and gallbladder if that seems clinically useful. That allows the patient to remain lying on their back. If you treat post-operative patients, I'd love to know about your successful treatment protocols. Please share them with me at honora@bluepoppy.com.

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business courses at acupuncture schools and conferences around the US and Europe. For more information on Wang Le-ting and Ma Dan Yang, see Honora's Distance Learning Class, Clinical Success Using the Treatments of Golden Needle Wang Le-ting.

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