Acupuncture Reduces Hemorrhoid Surgery Discomfort And Complications

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Nanjing University of Traditional Chinese Medicine researchers find acupuncture effective for hemorrhoid surgery postoperative relief. The research team integrated acupuncture into a standard hemorrhoidectomy postoperative care protocol. [1] Patients receiving both postoperative care and acupuncture in a combined treatment protocol had superior patient outcomes compared with patients receiving only postoperative care. The researchers conclude that the addition of acupuncture to a standard postoperative regimen improves outcomes following hemorrhoid surgery, including significant reductions of anal pain, swelling, and hematochezia (passage of fresh blood through the anus).

Group Selection Process
The study involved 60 patients at the proctology department of Nanjing Hospital of Traditional Chinese Medicine. All patients underwent hemorrhoid surgery and were randomly divided into an acupuncture treatment group and a postoperative care control group, with 30 patients in each group. The statistical breakdown for each randomized group was as follows. The acupuncture treatment group was comprised of 12 males and 18 females. The average age in the acupuncture treatment group was 42.1 (±8.3) years. The average course of disease in the treatment group was 15.2 (±7.5) years. The control group was comprised of 13 males and 17 females. The average age in the control group was 40.2 (±9.3) years. The average course of disease in the control group was 15.0 (±7.1) years. For both groups, there were no significant differences in terms of their gender, age, and course of disease prior to initiation of the
investigation. Patients participating in the study were between 18 – 70 years of age and had no abnormal results for routine blood tests, coagulation tests, electrocardiograms, and chest X-rays. All patients underwent a Milligan-Morgan hemorrhoidectomy prior to inclusion.

Drug and Acupuncture Treatment
For the control group, patients received routine postoperative care to reduce swelling and inflammation, treat dehydration, and prevent anal bleeding. For severe pain, compound aminopyrine phenacetin tablets were administered. Compound aminopyrine phenacetin tablets are a pain relieving and fever reducing compound. If not ineffective, a 5 mg intramuscular injection of dezocine was also given. Dezocine is benzomorphan opioid analgesic. For swelling, diosmin was prescribed. Diosmin is an oral phlebotropic drug used to treat disorders of blood vessels, including hemorrhoids. For continuous bleeding, hemocoagulase agkistrodon (HCA) was given. HCA is a thrombin-like enzyme used for arresting bleeding. The acupuncture group received electroacupuncture at the following acupoints (once per day, for a total of 3 days) bilaterally:

- BL25 (Dachangshu)
- BL57 (Chengshan)
- EX-UE2 (Erbai)

For Dachangshu and Chengshan, a 0.28 mm × 40 mm disposable filiform needle was inserted perpendicularly into each acupoint with a high needle entry speed, to a maximum depth of 30 mm. For Erbai, a 0.25 mm × 25 mm disposable filiform needle was inserted perpendicularly, to a maximum depth of 15 mm. The extra point Erbai is located 4 cun proximal to the wrist crease (and PC7) on the anterior aspect of the forearm on both sides of the flexor carpi radialis tendon. This pair of extra points is used within Traditional Chinese Medicine (TCM) for the treatment of the anus, including hemorrhoids with bleeding, anal itching, and rectal prolapse. Treatment commenced with patients in a lateral position. The acupoint sites were disinfected with a 75% alcohol aerosol.

For all acupoints, a deqi sensation was obtained and the needles were manually stimulated with xie (attenuating) manipulation techniques. Next, Dachangshu and Chengshan were ipsilaterally connected to an electroacupuncture device with a disperse-dense wave (2/15 Hz). The electrical intensity was adjusted from a low level (0.5 mA) to a high level (2 mA). The intensity level was set to patient tolerance levels or until rhythmic muscle twitching was induced. Once the electrical stimulation was set, the needles were
retained for 30 minutes. Acupuncture sessions were administered before the routine postoperative care was given.

**Result**
Measurements were taken before surgery and at 1, 2, and 3 days following completion of the surgery. Both groups had effective relief for postoperative anal pain, swelling, and hematochezia (P<0.05). However, the group receiving electroacupuncture plus routine postoperative care outperformed the group receiving only postoperative care at 2 and 3 days after surgery (P<0.05).

**Basis**
The researchers provided a historical context for the selection of acupuncture points administered during the investigation. Chengshan is located on the Bladder Channel of Foot Taiyang, whose divergent meridian (Bie Jing) “enters the anus.” Needling this point not only activates bladder’s function to clear damp-heat, but also accelerates qi and blood circulation around the anus. Dachangshu is a Back-Shu point on the bladder channel; needling this point regulates the intestines. As mentioned above, Erbai is an extra point indicated for the treatment of hemorrhoids. Needling this point reduces swelling, pain, and bleeding.

The researchers cited the modern anatomical correlation behind the protocol used in the study. Perianal nerves are innervated by the sacral plexus, which is formed by the lumbosacral trunk (L4–L5), the anterior division of the first sacral nerve, and portions of the anterior divisions of the second and third sacral nerves. [2] A previous study found that Chengshan (BL57) was innervated by primary sensory and motor neurons distributed in the dorsal root ganglia (DRGs) of the lumbar segments (L4-L5). [3] In another study, Wang et al. document that L4 nerve roots join at the intervertebral foramen deep to Dachangshu (BL25). [4]

**Acupuncture Research**
In a similar finding, Cai et al. conclude that body style acupuncture plus auricular acupuncture outperformed a drug therapy in reducing pain after hemorrhoid surgery. [5] One study group received acupuncture (body style acupuncture plus auricular acupuncture) and another received nimesulide, an NSAID used for acute pain. Nimesulide achieved a 56.7% total effective rate and acupuncture achieved a 90.0% total effective rate. No significant adverse effects were reported from the acupuncture patients.
After acupuncture treatments, one patient had dizziness, one patient had nausea, and zero patients had stomach pain. After drug treatments, five patients had dizziness, nine patients had nausea, and 11 patients had stomach pain. A total of 60 patients participated in the study and each group had 30 patients. The primary body style acupoints used in the study were the following:

- GV20 (Baihui)
- ST36 (Zusanli)
- LV3 (Taichong)

The researchers used the following auricular acupoints, alternating between left and right sides for each acupoint:

- Shenmen
- Occiput
- Sympathetic
- Rectum
- Anus

The researchers demonstrate that acupuncture produces superior positive patient outcomes without undesirable adverse effects. The research was published in the *Shanghai Journal of Acupuncture and Moxibustion*. The takeaway from the aforementioned research is a familiar theme supported by scientific evidence. Inclusion of acupuncture into stand perioperative protocols benefits positive patient outcome rates and minimizes adverse effects.
Notes


