

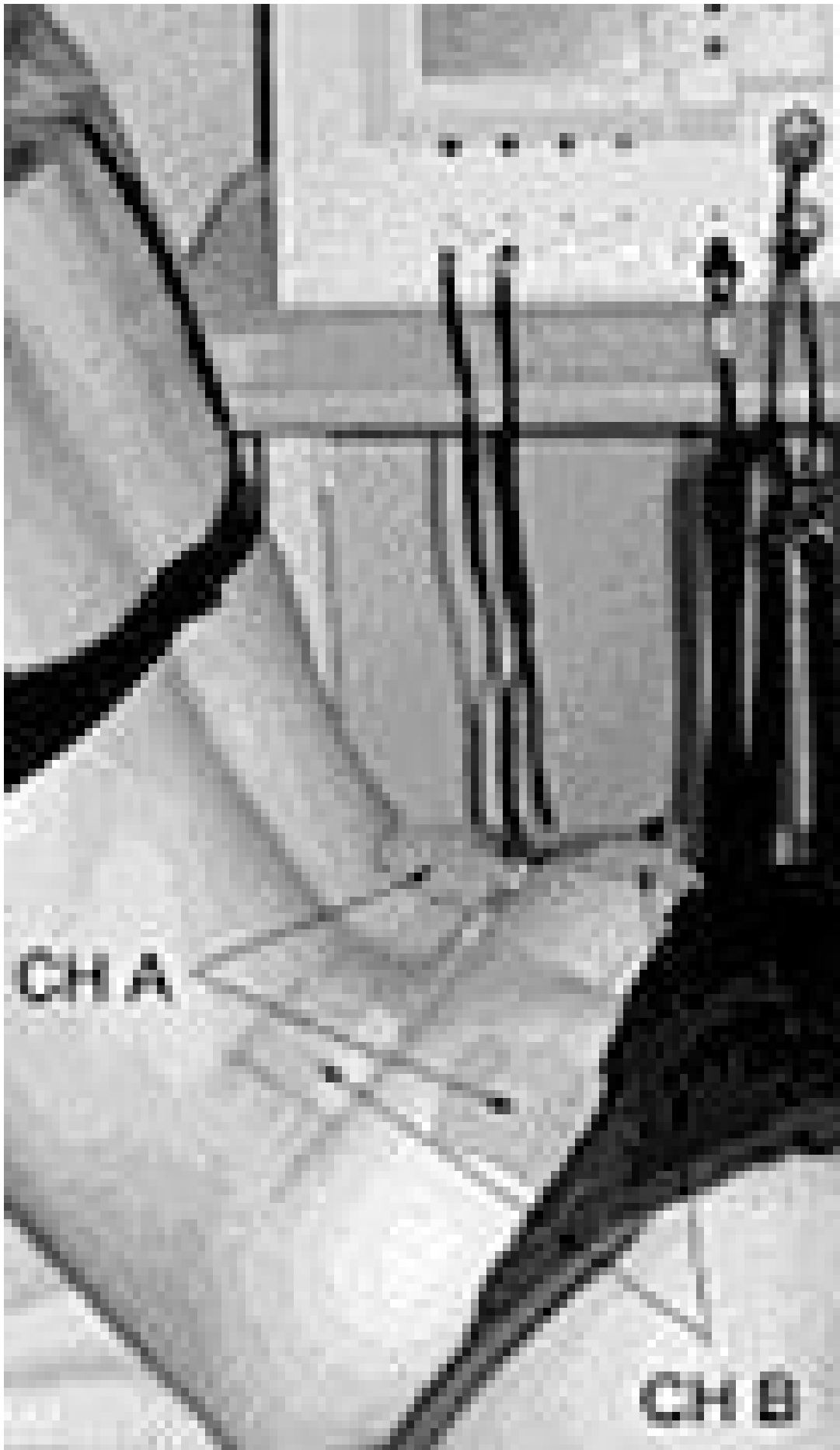


PAIN RELIEF / PREVENTION

Microcurrent-Assisted Yoga for Low Back Disk Injuries

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This article is about a simple, yet remarkably effective method to help your patients who are suffering with low back pain (or yourself). This technique is an example of how acupuncture, microcurrent stimulation and physical therapy can be combined advantageously to treat a difficult condition.



Electrode pads are placed on the patient's lower back in an "X" pattern.

It is estimated by the National Institutes of Health that 70 percent to 85 percent of all people have back pain at some time in their lives, and that it is the most frequent cause of activity limitation in people younger than 45 years old. As people age, it is natural for the intervertebral disks to lose some of their flexibility and fullness, making people more prone to back pain. Postural stresses, such as sitting at desks, extended driving, and using sofas and beds that are too soft, can aggravate pain. There are also many internal physical and emotional causations or predisposing factors for back pain.

Sciatica is back pain with radiculopathy (radiation of pain or numbness down a limb). The protocol described in this article is appropriate for back pain with or without radiation.



In his famous book, *Treat Your Own Back*, physiotherapist Robin McKenzie detailed exercises that patients with back pain can perform that will gradually heal pain from most herniated disk conditions. The beauty of these exercises is that almost anyone can perform them, even those experiencing severe, acute symptoms. I highly recommend this book to my acupuncture colleagues and their patients, as well as its companion volume, *Treat Your Own Neck*. These are available inexpensively through booksellers online.

In 1998, I experienced severe back pain, radiating down my right leg. MRI scans revealed herniated disks at the L3-L4 and L5-S1 junctures. On one, the disk material had extruded into the epidural space and was compressing the nerve. I was in frequent pain, and could not sit for more than a few minutes at a time. After receiving chiropractic work, acupuncture sessions and a series of medical epidural injections, the condition was not improving, and I started getting symptoms of "drop foot." To my physician, this indicated a dangerous level of nerve damage, and he suggested back surgery.



I opted instead to practice the exercises in McKenzie's book, and to give myself acupuncture and microcurrent interferential treatments with the Acutron Mentor device. After about a month of this

regimen, the condition started improving, and was completely cleared up within three months. Since then, I have performed frequent intense physical exertion, including two treks in the Himalayas, without a recurrence. Many other patients have also significantly benefited from this combination therapy.

There are several valuable exercises in *Treat Your Own Back*, but the most essential one is a variation of the "cobra" pose from hatha yoga. The patient is instructed to lie prone on the floor (face down). He or she then raises the upper body off the floor, resting on the elbows, and notes if this aggravates the back pain or sciatica. If not, the exercise can be continued. If aggravation is noted, the patient is instructed to experiment by moving the hips slightly to the right or left until he or she can find a position that allows the cobra pose to be performed without aggravation. When necessary, this slight shifting of the hips takes pressure off the sciatic nerve during the exercise.

This exercise is so valuable because most of the time, we bias our bodies in the direction of leaning forward - toward computers, in chairs, listening to others, etc. The cobra pose helps stabilize the torso through balancing muscular action of the torso. It can also help move a herniated disk back into more normal positioning.

I have experimented with adding acupuncture and electrical stimulation to this exercise with excellent results. Here is a suggested protocol:

1. Apply acupuncture needles or microcurrent polarized probe treatment to distal acupoints known to relieve low back pain and sciatica. These include UB 10 + 40; Kid 3; SI 3 + UB 62; UB 60; GB 44; or extra points *ling ku* and *zong bai* on the back of the hand opposite the painful side of the back. Apply strong stimulation on distal points for about 10 minutes with needles, or 12 seconds to 30 seconds per set of points with microcurrent probes.
When polarized probe stimulation is utilized, the positive probe can be placed on painful local points on the back, and the negative probe can be used to treat sequences of distal points. Appropriate settings are 75 μ A, 10 Hz, square waveform and negative polarity.
2. After acupuncture or microcurrent probes are applied, place four electrode pads on the patient's lower back in an "X" pattern. This requires two channels (circuits) on the Acutron Mentor, or other devices that offer microcurrent interferential therapy. This means that the two leads from channel A connect to the upper-right and lower-left pads, and the leads from channel B connect to upper-left and lower-right pads, in a crisscross pattern (see photo). The pads should be placed so that the current between them will flow directly through the painful area of the lower back.
3. To yield the best results, use a sequence of milliamp and microamp interferential. Interferential is an electrotherapy treatment that utilizes four electrodes through two separate output channels, each set to different out-of-phase frequencies. This generates a deeply penetrating complex current pattern in the body, with good pain-relieving and muscle-relaxing effects. Milliamp is a higher-intensity current that can cause muscle contractions and has strong analgesic effects. Microamp, or microcurrent, is subsensational, and works more on an energetic and regenerative level than milliamperes. I suggest eight minutes of milliamp IF, followed by 15 minutes of microcurrent. The Acutron Mentor IF preset #5 works well for this purpose, as it sequences through both steps automatically.
4. After current flow is started through the pads, the patient can perform the cobra exercise, as described above. Thus, he or she is receiving the benefit of simultaneous stimulation and exercise. McKenzie suggests 10-30 repetitions per session, with the upper body held up off the floor for about 30-60 seconds each time before gradually lowering down. The patient should rest and totally relax for about 30-60 seconds in between raises. The patient should raise the upper body as far as possible without pain, leaving the lower body completely relaxed on the floor.

- Only the arms and shoulders should be used to raise the body.
5. For the initial higher-intensity milliamp portion of the stimulation, start the treatment and then turn the intensity up to a tingling level that the patient reports is comfortable. As long as there are no noticeable muscle contractions under the pads, it is OK to exercise during this phase. After switching the current to microcurrent, the cobra repetitions can continue.
 6. At the end of the set, detach the pads and allow the patient to relax for a few minutes before getting up.
 7. A variation of pad placement is anterior-posterior microcurrent stimulation through the torso. To do this, place one pad of channel A on the left lower belly, and the other pad on the right lower back. Place channel B pads inversely - right belly and left low back. I recommend microcurrent only for this variation, as milliamp can be uncomfortable when applied to the front abdomen. Acutron preset I.F. #2 is appropriate.
 8. Place the pads directly over points found to be tender on palpation.

It is best if the patient performs the repetitions of cobra exercise 2-3 times a day, at least once with simultaneous microcurrent. The two variations of pad placement can be alternated for best results.

Other therapeutic exercises should be added to the regimen as the patient's condition improves. Please refer to McKenzie's book, or a qualified therapist, for more information on appropriate back exercises.

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