By Renee Diiulio Workers

I lexion-distraction is one of the most well-researched chiropractic techniques currently in use. This could be in part attributed to its age: the technique, known as the Cox Technic, was developed in the 1960s by James M. Cox, DC, DACBR, and has had constant improvement since

Chiropractors certified in flexion-distraction help to relieve the misery of and restore function in patients with back pain (and even arm, leg, and neck pain, too).

then. Many chiropractors are exposed to the technique in school, where they often learn the very basics. Yet there is much more to learn that can impact the success of treatment.

Those who decide to pursue Cox Technic certification obtain advanced training that assures that any certified practitioner provides completely consistent care. Movements, pressure, and placements are all the same. (Computer programs measuring these factors are used during educational seminars to ensure uniformity.) Use of the technique is often maximized, as are the results.

"We get miraculous results because treatment is very specific to the area," says Mike M. Poulin, DC, Cox recertified, Poulin Chiropractic, a practice with two locations in Virginia (Herndon and Ashburn). Poulin is a true believer—he attributes his mobility today to the Cox Technic.

"If it wasn't for Cox Technic I wouldn't be able to treat the number of patients I do, especially as busy as our two practices are today. I'd probably be on disability," Poulin says.

The Pains

Poulin suffered from a condition many Cox Technic patients share: back pain resulting from a herniated disk. Cox Technic decompression provides relief of spinal pain due to disk herniation and stenosis, facet syndrome, spondylolisthesis, synovial cyst, sciatica and leg pain,



whiplash, headache, arm pain, and neck pain. Contraindications include fractures, open wounds, and infections, but because the method is so gentle, there are few other contraindications.

Poulin sees a lot of lumbar disk herniation; cervical, thoracic, and lumbar stenosis; scoliosis; and facet issues that respond to Cox. "We are even starting to see things you would not normally consider, such as fragment disk prolapses," Poulin says.

Leisa-Marie Grgula, BS, DC, a chiropractic physician with the Accurate Care Pain Relief Center in Phoenix, who is also recertified in Cox, believes that Cox Technic has always had a wide range of applications and notes that founder Cox uses the technique almost solely in his practice. Grgula uses Cox on about 80% of her patients (she sees an average of about 40 patients per day).

Alfred Furtado, DC, co-clinical director at Shoreline Spine and Pain Associates, PC, in Guilford, Conn, does not employ Cox quite as much—on only 40% to 50% of his average 100 patients per week—but still believes in its efficacy. "Not all patients respond, but there has been some good literature that demonstrates its efficacy. It's important to be aware of the literature that exists and what the indications are for flexion-distraction," Furtado says.

The Benefits

Cox Technic offers summaries of and links to some of the existing literature on its Web site, particularly those studies funded by federal grants. In one such project focused on biomechanics, researchers at the National University of Health Sciences (Lombard, Ill), in cooperation with the Loyola University Chicago Stritch School of Medicine, determined that flexion-distraction allows the reduction of intradiskal pressure (to as low as -192 mm Hg), an increase in intervertebral disk height, and an increase in intervertebral foramen size by 28%.¹

In another study, the team found that flexion-distraction did significantly better than physical therapy for chronic/severe, chronic/acute, and radiculopathy patients. (Physical therapy, however, had better results with chronic/recurrent back pain.)

Flexion-distraction is comprised of doctor-applied pressure at specific contacts intended to relieve pain, realign the spine, and/or restore range of motion. Because it is controlled by the doctor, the process can be very gentle and therefore applied to weaker patients, such as the osteoporotic and fused postsurgical patients.

"You can't do a typical adjustment on a 90-year-old lady with osteoporosis without breaking something, but with Cox, you can decompress very gently. If someone comes in with severe pain, you can start out very gently. We always tolerance test every patient and start the technique slow," Poulin says. But the effort is still specific. "The doctor can have a hand specifically in place on the spine and isolate one or two vertebra. So if we want to isolate the L5 vertebrae, we set up on the vertebra above L4," says Poulin, who contrasts this methodology with typical decompression, with which the entire spine is treated.

The Results

The technique can produce amazing results, and if it does not, then the strict Cox Technic practitioner will stop trying. The method's protocols require improvement. "If we do not find 50% relief within 4 weeks, we refer the patient to another medical discipline, such as a neuroconsult," Grgula says.

If that relief has been achieved, then the number of visits is reduced and the process is repeated. "We don't go past 12 visits if the patient is not 50% better. We'll do something else—an MRI or neurosurgical consult, for example," Poulin says.

The treatment plan is therefore constantly changing in response to the patient's condition. Goals may represent a shifting pattern of pain reduction and restoration of function. Pain relief often comes with the reduction of pressure on the cord or peripheral nerve. "Outside of pain relief, we basically want to restore function to the levels in question," Grgula says.

"If a patient can only sit for 5 minutes, we want them to be able to sit for 10 minutes, then 20 minutes, and up. We want to get them to where they can sleep and restore their quality of life," Poulin says.

The focus on results gets the attention of both patients and physicians, and many certified Cox Technic practitioners find their schedules are kept full primarily through referrals from patients, physicians, and even other Cox practitioners. Certified Cox practitioners are more comfortable referring to one another because the shared learning ensures that the patient will receive the same therapy.

The Table

The volume helps to support the proper equipment. While a Cox Table is not necessary, those who do have them swear by them. "The majority of cases we see are so much more complicated and chronic that I don't think the traditional treatment would work. If a disk is torn, we can't side posture someone without making it worse," Poulin says.

The Cox Table is now in its seventh generation and has been modified in response to research as well as user feedback. The Cox7Table is available through Track Corp in Spring Lake, Mich, and has been designed to use the doctor's hands as a guide while protecting the doctor ergonomically. (For instance, a ball hand grip for adjustments rather than a "T" reduces wrist and hand stress.)

Adjusting features permit chiropractors to perform flexion, extension, lateral flexion, circumduction, and rotation (cervical) movements with or without long y-axis distraction; smooth, safe full-spine distraction; and manual and automated long y-axis cervical, thoracic, and lumbar spine traction. Segments include



a cervical axial, long Y-axis distraction headpiece (newly patented); a free-floating, smooth cervical spine distraction unit; an optional thoracic drop; and an adjustable face piece with an eye socket cutout for patient ease of breathing and nose and eye comfort.

Flexion-distraction tables are also available from manufacturers such as Hill Laboratories, Eurotech, and Lloyd Table Co. Hill Laboratories' Air-Flex is an electric adjustable-height treatment table that features air-powered flexion and distraction.

"All manual flexion tables have to be counterbalanced for the patient's weight," says Hill Laboratories, Frazer, Pa, president Howard Hill, who points out that the Air-Flex uses a pneumatic system.

"We chose a pneumatic system for our tables because it is so reliable and easy to use," Hill says. When the patient is on the table, the flexion cylinder can be rapidly increased or decreased with air so that the weight of the patient can be counterbalanced. Little force to flex the table is then required even on the heaviest patient.

With the air compressor built right into the electrical elevation base, it is also used to create distraction. Hill even has an optional feature (auto-distraction) that allows the doctor to auto-matically cycle the traction-decompression.

"The compressor also enables us to offer pneumatic drops on the table. Instead of hand levers, we use the air system to activate any one of four drops on the table," Hill notes. Its tables

also feature an air-powered, abdominal thoracic breakaway as well as an optional cervical flexion headpiece for manual flexion on the cervical spine. Manual and autoflexion options are also available; the doctor need only move a lever to convert the Air-Flex from manual mode to automatic.

The Air Flex gives you a lot of versatility to treat patients," says Hill, who notes that the Air-Flex can be customized to the doctor's needs.

"What makes any table flexion-distraction is that it allows us to do the technique properly and document the protocols used on each specific condition," Grgula says. Flexion-distraction tables can be used alone or in conjunction with electrical stimulation, ice/heat, ultrasound, and strengthening exercises. The intent is to enhance clinical outcomes.

Properly applied, the Cox Technic can provide that benefit, and many patients respond who have not had luck with previous methods. Poulin recalls that he discovered Cox after surgery and reinjury drove him to find the "best possible treatment" for his back. "My disk used to be bone-

Tools of the Trade

Do your homework before making a decision on which flexion-distraction table is right for your practice. The following manufacturers offer some of the more popular flexion-distraction tables available.

Chattanooga Group

4717 Adams Rd Hixson, TN 37343 (800) 592-7329 (800) 242-8329 fax www.chattgroup.com

Eurotech Tables

1521 Ninth Ave SE, Suite 3 Watertown, SD 57201 (800) 743-7738 www.eurotechtables.com

Hill Laboratories Co

3 Bacton Hill Rd Frazer, PA 19355 (877) 445-5020 (610) 647-6297 fax sales@hilllabs.com www.hilllabs.com

Lloyd Table Co

102-122 W Main St Lisbon, IA 52253-0899 (800) 553-7297 (319) 455-2166 fax sales@lloydtable.com www.lloydtable.com

Track Corp

18438 171st Ave Spring Lake, MI 49456 (616) 850-8630 (616) 850-8621 fax info@coxtable.com www.coxtable.com

Williams Healthcare Systems

158 N Edison Ave Elgin, IL 60123 (800) 441-4967 (847) 741-3661 fax info@williamshealthcare.com www.williamshealthcare.com



on-bone lumbar L5 disk, but now, it's three times the size and looks normal," Poulin says. **CP**

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Reference

 Cox Technic. Funded Projects Completed & Underway. The Research. Available at: www.coxtechnic.com/research.asp. Accessed October 1, 2008.



Learn how to use a flexion-distraction table—read the March 2007 Archive at www.chiropub.com.