

Accelerated Healing Response

The Bowen technique can complement traditional PT

In this age of HMOs, limited visits and shrinking reimbursements, you want to accomplish as much as possible at each patient visit. The more you can achieve in each of those visits, the further along the patient will be in the healing process before his visits run out.

At the same time, you do not want to overload the body so much that it increases the chance of re-injury. Since every patient heals differently, the best way to assure both accelerated healing and reduced risk of re-injury is to use the body's innate healing system; this system regulates the rate of healing, which is based on the extent of the injury and the body's resources. One of the reasons that rehabilitation can be slow is that shock, trauma and stress can lock the sympathetic nervous system (SNS) in an excessive state of stimulation.¹⁻⁶ Since this involves the survival response, it has top priority.

The Difficult Patient

Evolutionally speaking, if the body is in survival mode, healing does not usually take place until the body is sure of survival. Studies show that when the body is in a hyperactive state of sympathetic innervation, healing is blocked.^{1,2,6,9} Many physical therapists have had to deal with these patients who don't seem to heal. These patients seem to actually resist healing; their bodies are still locked in SNS innervation so nothing works. They are often told that they will "just have to live with it."

When the body is locked in a hyperactive state of sympathetic innervation, the affected portions of the SNS make exaggerated responses to relatively minor stimuli.^{1,5,6,8} Another impediment to healing is that the body can work against itself. Muscles are usually thought to cause motion through contraction, but when chronically contracted, they can act instead as brakes by opposing motion.¹⁰ Our sensory-motor systems repeatedly respond to trauma and everyday stresses via muscular reflexes. These reflexes can create habitual muscular contractions that we are not able to relax voluntarily.¹¹ In fact, research has shown that this contraction continues uninterrupted even during sleep.¹² Thomas Hanna called this habituated state of involuntary muscle contraction "sensory-motor amnesia" (SMA). Controlling our muscular movements requires a continuous input of sensory information.¹³

Since the sensory and motor divisions of the CNS are part of the same feedback loop, each affects the other. Hanna stated, "Matura-

tion is the growth of greater and greater cortical learning. This process can continue indefinitely, improving and refining human actions, unless negative conditions force the brain into emergency actions in order to survive. Sustained stress and traumatic accidents are such negative conditions that sidetrack the voluntary cortex from its normal control of the sensory-motor system."¹⁴

Working with the Body

Patrik Rousselot, PT, CBT, a private practitioner in Oakland, CA, and a physical therapist since 1980, searched alternative therapies for 12 years before he found a remarkably effective tool that helped patients who resisted healing, and that reduced rehabilitation time for most of his other patients.

"I could not understand how doing so little structural work could have such a deep impact on patients physically, and often energetically and psychologically," explained Rousselot.

The Bowen technique is a gentle but powerful technique that works by balancing the autonomic nervous system (ANS), which controls more than 80 percent of our bodily functions.

The human body is a massive complex of feedback loops; for example, when you eat a donut, your body digests it and converts it to sugar. The sugar is absorbed into the bloodstream, and the body senses the rise in blood sugar. The pancreas responds by secreting insulin to decrease the blood sugar levels. Recent discoveries

have shown that the whole nervous system functions like a vast communication network. Feedback is constantly exchanged among all the different parts with the brain, which acts as a switchboard by integrating and coordinating all activities. Tapping into these feedback loops and adding new information can allow you to accelerate healing—this is the philosophy behind the Bowen technique.

A Bowen treatment consists of a series of gentle but precise mobilizations performed by the thumbs or fingers on muscles, tendons, ligaments or nerve sheaths. First, the skin is pulled to the side of the structure; gentle pressure is then applied to the edge of the muscle to a point of resistance. This challenges the muscle and pushes it out of its normal position.

Next, a gentle rolling move is performed over the structure while maintaining gentle pressure on the site. This stimulates the proprioceptors' sending of information through the nervous system to the



A clinician performs a Bowen move on the erector spinae. (photos/courtesy Dan Amato)

modalities

brain. The body is sent a message that the emergency is over, and it is now possible to initiate healing.

Put simply, a Bowen treatment resets the body and allows it to heal itself. After each series of Bowen moves, there is an important pause to allow the body to respond to new information from the proprioceptors. It is during this pause that the body begins to make changes.

"After a Bowen treatment, we usually do not treat a patient again before five days to allow time for the body to respond to the work," Rousselot cautioned. Clinically, ther-



A Bowen move is demonstrated on the vastus lateralis tendon.

apists allow this healing process to continue for the next five to seven days or longer. It seems that other modalities can neutralize the changes the body is trying to accomplish.

It is not yet known exactly why this happens, but it is frequently seen clinically in clients who do not heed the five-day rule. Perhaps a modality performed on the body in the five days following a Bowen session competes for the body's resources and lessens any effects.

Increasingly, other physical therapists are also finding their way to the Bowen technique.

"I work for a corporation-owned practice, and managed care is big here," said Jennifer Martin-Riggio, PT, staff therapist at United Therapy Network, Fresno, CA. "The Bowen technique has made me a much more efficient therapist. I get faster results, especially with acute injury." Martin-Riggio strongly recommends the technique to other PTs, especially in busy practices in which therapists juggle several people per hour.

Proposed Mechanisms of Action

There are many proposed mechanisms of action, but only a few of them will be discussed here. It is known that Bowen balances the ANS, taking the body out of its hyperactive state of sympathetic innervation. One study has shown that the Bowen technique positively affects the heart rate variability (a measure of ANS function).¹⁵

The next proposed mechanism is through the Golgi endings, located in the tendons. Discharges from these Golgi endings are sent

to the spinal cord via dorsal root fibers causing an inhibitory effect, which results in relaxation.¹⁰ Spindle cell receptors are located within the muscle itself. When these spindle cell receptors are stretched, they contract; when they are shortened, they relax.¹⁰

A Bowen move stretches the muscle and suddenly releases it, which may cause the opposing reflexes of the spindle cells and the Golgi endings to be triggered almost simultaneously, causing them to reset. Since most moves are done on the origin, insertion or belly of muscles, the Golgi endings and the spindle cell receptors are the receptors most likely stimulated. Joint proprioceptors may also be involved. They report joint position and motion, direction of motion and velocity of motion.¹⁰

The moves performed around joints may stimulate the joint proprioceptors' sending of feedback to the CNS, allowing normalization of joint function. It is probable that all of these mechanisms, plus a few others, are stimulated each time a Bowen move is performed.

In a study done by Seba on patients diagnosed with fibromyalgia, all had various degrees of relief lasting from a few days to several weeks.¹⁶ Another study by Prichard showed that the Bowen technique reduced levels of anxiety, anger, depression, fatigue and confusion thereby enhancing patient's positive feelings.¹⁷ Many other studies are under way around the world to study the effectiveness of the Bowen technique.

History of the Bowen Technique

Tom Bowen developed the Bowen technique almost 50 years ago in Australia. Though he was not formally trained in any modality, Bowen had a genius for distinguishing patterns of muscular dysfunction, which he correlated to specific complaints. This allowed him to create procedures that stimulated the body to heal itself.

A 1975 study conducted by the Australian government determined that Bowen treated 13,000 patients a year. They also documented an almost 90 percent success rate, with most problems resolved in one or two sessions. In 1974, at a national conference, Bowen met Oswald Rentsch, who expressed an interest in Bowen's work. Bowen invited him to study with him in his clinic. Since Bowen had no notes, charts or manuals, it was Rentsch and his wife Elaine who organized and documented Bowen's work.

Before he died, Bowen asked Rentsch to teach his technique. Since then, Rentsch has taken the Bowen technique to many different countries. Although the Bowen technique has only been in this country for about 10 years, it is already proving its value to both therapists and clients.



Patrik Rousselot, PT, CBT, doing the Bowen shoulder procedure.

Who Can Benefit?

Many types of problems respond well to the Bowen technique: ankle sprains and strains, carpal tunnel syndrome, repetitive stress injuries, chronic pain syndrome, coccyx pain, concussions, fibromyalgia, hamstring strains, herniated disks, knee pain, loss of joint mobility, pain and limitation post-surgically, pelvic imbalances, migraines and headaches, pregnancy related back pain, rotator cuff injuries, sciatica, shin splints, shoulder adhesive capsulitis, stress, TMJ problems and whiplash injuries.

Another advantage is the built-in pauses. Depending upon the clinic's layout, a therapist can easily work on several patients simultaneously.

Rousselot was so impressed with the Bowen technique he became an instructor; he is currently a senior instructor and has been teaching for six years. Recently he was asked to write a chapter on the Bowen technique for *Clinicians' Complete Reference to Complementary and Alternative Medicine* (Mosby).

Rousselot does not hesitate to recommend the Bowen technique as a modality to other physical therapists for several reasons. Conditions respond faster with the Bowen technique than with conventional medicine, and improvements like increased ROM and decreased pain often happen by the end of the treatment. If relief does not happen this quickly, it will usually occur in the following hours or days, as the body continues to balance itself. ■

• **References available at www.advanceforPT.com. Select "References" on the left menu bar.**

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