

## BACK ON TRACK

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# Getting Aggressive

SPECIFIC EXERCISE PROGRAMS PROVE EFFECTIVE IN DEALING WITH BACK INJURIES

**FOR MANY YEARS**, the thinking was that rest and inactivity were the best ways to treat a back injury.

Such thinking has taken a 180-degree turn. While it may be true in certain extreme cases that doing nothing is the best medicine, a growing number of physicians and therapists believe that aggressive rehabilitation is now the way to go in treating back injuries.

“Medical studies now show that remaining active actually hastens the patient’s ability to

return to normal activities,” says physical therapist Richelle Sipiora of MedX Spine and Orthopedic Physical Therapy in Fort Collins, Colo. “An aggressive, sports-medicine approach that emphasizes functional restoration has come to the forefront in treating spine pain.”

Dr. Brian Nelson, who operates five Physician Neck and Back Clinics in the Minneapolis-St. Paul area, stopped doing general orthopedic surgery in the early 1990s and instead began concentrating exclusively on nonoperative treatments of chronic neck and back pain. He has done much research and many papers on the subject, and is armed with statistics.

“It’s the 10 (percent) to 15 percent with back problems that generate 85 (percent) to 90 percent of the overall costs,” Nelson says. “When you figure multiple MRI exams, surgery where people are off work for months and months, and injections, costs add up.”

In 1998, Nelson did a survey of 46 back patients who were told they needed back surgery. Instead, all were treated with an aggressive exercise program. He was able

to track 38 of them 18 months later. Only three needed

surgery. The average cost of rehabilitation for the 35 who underwent rehab was \$2,000 for an average program that lasts two to three months with two sessions weekly.

For those who had a back fusion procedure in 1999, the average cost was \$168,000, which includes three factors: cost of direct medical care, indemnity (wages employers paid) and permanency (in most states if you hurt your back you get paid a lump sum).

“The real breakthrough is before anybody does the expensive stuff,” Nelson says, “we put them through a real aggressive specific exercise program. To me, that is the breakthrough. That’s where value to society is going to come. Our research indicates that when we do that we shrink the pool (of those 10 percent to 15 percent spending the most money) by 75 percent. We want to save the expensive stuff for those who fail (with the aggressive specific rehabilitation).”

Dr. Vert Mooney was a spine surgeon for 30 years, most recently at the University of California, San Diego. He was so discouraged with the type of physical therapy being used that he joined with several partners to start Measurement Driven Rehabilitation Systems. There are eight physical-therapy facilities, called spine and sport centers, with

## Building the back machine

**ARTHUR JONES CAME FROM** a family of physicians. He dropped out of school in 10th grade and became far wealthier than any of his family members, cracking the Forbes magazine list of the 400 richest people. Jones made his money on Nautilus equipment, whose prototypes he introduced at a Mr. America Contest in 1970.

What makes Jones important to orthopedic surgeons and everyone who deals with back injuries are the MedX machines he introduced in 1991. His idea, when he initially started working on what would become MedX machines, was to develop a

mechanism for testing knee functions. The computerized MedX machines strengthen the musculature of the back and increase range of motion. This, in turn, leads to decreased back pain. While exercising the lower back, the MedX restraints inhibit the use of the pelvis and legs.

According to the Core Spinal Fitness About Us Web site: “The capabilities of MedX equipment are unprecedented. Each piece in the product line is designed to achieve efficiency in training by offering resistance curves matched to tested and proven stretch profiles.”

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seven in California and one in Boise, Idaho.

“(We) use progressive resistance,” Mooney says. “It’s exercise on specialized equipment designed specially for neck and back injuries.”

It was after Mooney relocated from the University of California, Irvine to UCSD that he started using MedX machines, which are computerized back-strengthening machines.

“I was very surprised at how effective they were,” Mooney says. “Degenerative disc problems usually can be fixed by an exercise program. The McKenzie Treatment Approach works well for patients with acute back problems.”

The McKenzie Treatment Approach is based on a thorough evaluation that examines the effect of spinal movement and positioning on the pain. It promotes the body’s potential to heal itself without medication or procedures dependent upon a practitioner.

“Fundamentally, our bodies are designed to move,” says Dr. Christopher Summa, owner of The Spine Clinic of Monterey Bay in Aptos, Calif. “When we don’t move, our bodies rebel and go into spasms. It (inactivity) can become more painful than the initial problem. That’s why there has been the latest shift to rapid motion and early rehabilitation.”

J.D. Murphy, owner of MedX Spine and Orthopedic Physical Therapy in Fort Collins, has been a disciple of this approach since 1990, which he likes to refer to as “challenging” (rather than aggressive) exercise. In fact, he recalls when a physical therapist told him he was “practicing voodoo,” when he moved away from the conventional thought process at the time that said heat, ultrasound and low-impact exercise were the way to go for back patients.

“There’s a lot of talk in the medical community about exercise, but what they don’t mention is that all exercise is not created equal,” Murphy says. “The pool is not the place (to strengthen your lower back). You need specific exercise for those muscles. They (exercises) must meet certain requirements.

“If all exercise would work, people would walk around the block and their back problems would disappear. What we know now is that exercise must be challenging, that it must elicit a strengthening response. It must increase in resistance to meet strength gain.

“It takes time to bring muscle strength up. The stronger you make your back muscles, the more it’s going to help. When you work hard to strengthen lumbar or cervical muscles, that’s what generates results. We like to bring resistance up 3 (percent) to 5 percent each time patients work on the MedX machines, which force muscles in the lower back to be the primary exercising muscles.”

Interestingly, Nelson feels the biggest problems in the system are not from patients but from health practitioners.

“The weak link in the chain is not the (injured) people out there but the health-care providers who don’t give patients the message,” Nelson says. “The reason is that most don’t understand. With most doctors, if they send you off for treatment and you come back and say you’re not doing well, they’ll switch treatments. But it’s common for (back treatments) to take several weeks before you notice the benefits.

“It’s not unusual for people to come into our program and get sore. They’re not going to do that unless they are with someone (doctor or therapist) they trust. You have to give them a compelling reason not to quit. You have to convince them that it is OK to hurt, that they are not damaging themselves.” **SCM**