

SET TALK

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REHABILITATION OF SCOLIOSIS CONDITIONS (Part 2 of 2)

This installment will describe how to develop protocols that would effectively resolve scoliosis problems for each of the cases that were described in the first installment. Let us review our scoliosis cases from the last issue.

Shirley, a 35-year-old mother of three children, was referred to me for low back pain that developed after the delivery of her third child. She reported that she had been doing a lot of lifting of all three of her children ages 5 years, 3 years, and 6 months, and that her back was getting worse. In addition, she had complications during the last month of her pregnancy, so the doctor had insisted that she stay in bed and off her feet as much as possible. She brought her chiropractic x-rays that showed a narrowing of the disc space in the lumbar region with some arthritic spurring already developing, a scoliotic curvature of her entire spine and significant rotation of her iliums, one anterior, one posterior resulting in a tipped sacrum. It was obvious that Shirley could not stop lifting her children, but she needed relief from her back pain as soon as possible.

Jason, a 49-year-old accountant, had been rear-ended two years ago while sitting at a stop light. He had been receiving chiropractic care ever since the accident until his insurance was depleted. His diagnosis was a flexion/extension injury of the cervical spine with a slight herniation between C3-C4 and a bulging disc between C7-T1. In addition, his x-rays showed a significant degree of scoliosis of his entire spine with the rotation of the iliums and tippage of the sacrum. The chiropractic notes indicated treatment of the flexion/extension injuries of the neck only, and no mention or diagnosis of the scoliosis in the thoracic and lumbar spine. The discs that were injured were at the greatest degree of the scoliotic curvature. Jason came to me because a friend of his had insisted that I could help him, and since his PIP had run out insurance no longer covered chiropractic care. The sad part is that, even though he had two years of treatment, he only had minimal improvement and was now also experiencing severe headaches. He needed some effective therapy.

Carol, aged 13, was brought to me by her mother after she had been picked out of a school scoliosis screening and was referred to a neurosurgeon for possible surgical

intervention. The parents were scared when they saw that Harrington rods were part of the surgical intervention suggested for their daughter's scoliosis. The x-rays and MRI's that confirmed the scoliosis showed a more than 40 degree scoliotic curvature. The neurosurgeon had told them that since she was in a growth spurt this would probably progress to somewhere around 50-60 degrees by the end of her normal growth and would leave her incapable of bearing children. Carol was reasonably athletic and really wanted to join the high school girls' volleyball team as she was already 5'10" and played very well. She only occasionally complained of back pain or any discomfort. However, she shared her parent's concern about the prognosis of dire pain, disc degeneration and inability to carry a child due to the scoliosis.

Anita, a 63- year-old massage therapist who had been practicing for 20 years, came for sessions because of a sizeable dowagers hump and inability to stand up straight. After a bone density test she was told by her doctor that she had osteoporosis and was collapsing into a scoliotic curvature of her spine. Other than reinforcing her bone mass with medication and exercises, there was little else she could do. In addition, they informed her that the scoliotic collapse was irreversible, and that chiropractic manipulations might cause fractures of her weakening spine. They also told her that she would have to quit doing massage because the scoliotic collapse and fractures of the spine would worsen almost immediately. Having been a massage therapist for 20 years, Anita had heard of the soft tissue structural work that I do and wanted to know if the scoliotic curvature of her spine could be rehabilitated so she could continue doing the massage she loved.

Now let's look at the development of some protocols that effectively addresses the rehabilitation of each of these cases.

Shirley had lost a great deal of the tonus in her intrinsic muscles that had helped counter balance her scoliosis after having a month's bed rest. In addition, the spreading of her pelvis during the birth process had further rotated and weakened the ilium/sacrum relationship causing her left ilium to move even further into anterior rotation and the tippage of the sacrum to increase. The musculature of her hips and legs in relationship to her sacrum and iliums was my first focus, especially since her low back and abdomen had weakened while on bed rest. Her treatment began on the soft tissue in the anteriorly rotated left ilium and leg to release her quadriceps, adductors, hamstrings, lower leg, glutes, quadratus lumborum, obliques, rectus abdominis, and iliacus. Working in this sequence first allowed her left anteriorly rotated ilium to release back to support her

sacrum and reduce the increased separation that had occurred during delivery. This also unwound and rebalanced some of the lumbar curvature of the scoliosis which was destabilized by the weakened abdomen and low back muscles. It was now time to release the opposite side where her glutes, hamstrings, quadratus lumborum and psoas were overcontracted shortened in compensation for the anterior ilium. This brought both iliums into balance and reduced the tippage of the sacrum dramatically resulting in a significant decrease in the scoliotic curvature and low back pain.

Jason was experiencing most of his pain in his neck and shoulders due to his auto accident which had further destabilized his scoliosis putting pressure on his cervical and lumbar discs. Structural evaluation revealed an acute head forward posture, head tipped to the right, right shoulder medially rotated and dropped, left shoulder at the superior angle of the scapula was raised, and there was additional shortening of the back of his neck. The pectoralis muscles were treated first, then the anterior neck to reduce the collapse of the head being forward. This was followed with the tops of the shoulders and back of the neck which allowed the head to move back and balance with the shoulders. After several sessions the scoliosis in the rest of his spine became the limiting factor and needed to be addressed by balancing his pelvis as in Shirley's case. Following that same sequence his anterior ilium was released back to support the sacrum and reduce the compensation of the posterior rotated ilium. This moved the sacrum into balance which took the pressure off the curvatures in the spine and allowed his lumbar discs to heal.

Carol, the 13-year-old, was in excellent shape being an athlete, but was facing a growth spurt that could increase the developing scoliosis. She also had a major anterior/posterior ilium rotation with a substantial tippage in her sacrum, and her head was significantly in front of her shoulders resulting in a shortening of the back of her neck. Since Carol was constantly jumping up and down playing volleyball, balancing the iliums to support a balanced sacrum was the focus of the initial treatments. Without this support the curvature in her spine would have rapidly increased. As in the previous cases, the anteriorly rotated ilium was worked first using the same sequence of quadriceps, adductors, hamstrings, lower leg, glutes, quadratus lumborum, obliques, rectus abdominis, and iliacus. Then the posteriorly rotated ilium was released by treating the quadriceps, hamstrings, glutes, quadratus lumborum, obliques and psoas. After several sessions, the ilium rotation was decreased, her sacrum was leveling out, and the curvature of her lumbar and thoracic spine was rapidly improving. It was now time to treat the neck and shoulders working the pectoralis muscles and anterior

neck first, then the tops of the shoulders and back of the neck. For the next four weeks I alternated between the neck and shoulders and the low back. When Carol was re-evaluated, her scoliosis was in the 20 degree range and her parents were extremely pleased. Due to the fact that she was in a growth spurt, and actively jumping and jamming the sacrum, I continued to treat her on a monthly basis for the next five years. Her scoliotic curvature remained stable and she was able to have a college career in volleyball.

Anita was aggravating her scoliotic condition by doing massage. Her structural evaluation showed her head was far in front of her shoulders and the back of her neck had become very shortened. She had a very exaggerated dowager's hump from using her arms and locking her shoulders down while doing massage. This area was also where she experienced the most pain and difficulty while doing massage. Therefore, initial treatments focused on releasing her internally rotated shoulders and anterior neck allowing her head to move back, then releasing the tops of her shoulders and back of the neck allowing her to straighten up and her shoulders to drop. This also had a dramatic effect on reducing the size of her dowager's hump. It was then necessary build support in her low back by balancing the iliums and reducing the tippage of her sacrum using the same sequences as the other three cases working the anterior hip first, then the posterior hip. Another important detail for Anita to change was the height of her massage table so that her shoulders were not hiked up and her head was not thrust forward when she was doing her massages. Once this was accomplished she was able to maintain correct structure, and continued working even though the osteoporosis was still in a degenerative state and losing bone mass. With the scoliotic curvature greatly reduced, the pressure was now distributed evenly across the vertebral surfaces and no longer on the edges of her vertebrae which prevented the compression fractures. She was now able to enjoy giving massages again.

When working with all four of these clients, the most effective soft tissue approach was the three-step approach of 1) releasing the fluids and toxins, and clearing the trigger points, 2) unwinding the myofascial holding patterns that held the muscles of the structure in collapse, and 3) releasing individual fibers, scar tissue and adhesions. This approach enabled each of the clients to be treated within their pain threshold, regardless of the acuteness of the condition, and to have deep structural balancing work that could have been impossible and sometimes dangerous for them to tolerate using another approach.