Working with Scoliosis – In Our Clients and Ourselves

By Bibiana Badenes, Certified Advanced Rolfer™, Rolf Movement® Practitioner, and Bethany Ward, Rolfing® and Rolf Movement Instructor

Bibiana Badenes (left) and Bethany Ward (right)

ABSTRACT *The authors dialogue about scoliosis, the personal impact of having scoliosis, and how they have used their own bodies through self-experimentation to develop Rolfing Structural Integration and Rolf Movement techniques to bring clients into greater body awareness, ease, and efficiency in movement. With two perspectives – Ward works mainly with adults, and Badenes with teenagers individually and in groups – they offer insights that support experimentation and improvement in how we work with clients with scoliosis.*

How has scoliosis affected your life?

Bibiana Badenes:

I really think my scoliosis has shaped who I am and influenced my personal development. During my childhood, I had a lot of back and neck pain and movement limitations in specific areas.

Bethany Ward:

I agree. While I doubt I would have chosen a scoliotic spine, it continues to be an amazing teacher. You can't get away from deep myofascial and proprioceptive imbalances. There's nowhere to go! The more you try to abandon, ignore, or cajole an achy back the worse it gets, because you keep moving and behaving in the same ways. Eventually you have to sit with it and feel it. Self-judgment can give way to curiosity about what you're sensing and how your body works. In a society forever looking outside the self, befriending scoliosis demands feeling what's happening inside. I used to do sitting meditation, but in recent years a somatic practice has taken its place. It's great self-care for my spine, but I also find it very mentally and emotionally integrating.

When did you discover that you had scoliosis?

BW: I was particularly susceptible to neck pain and headaches throughout college but didn't know why. It wasn't until my Rolfing Structural Integration (SI) training that anyone mentioned my spine. I clearly remember a fellow student asking, "So how long have you had your scoliosis?" I was taken aback but laughed and responded, "I don't have scoliosis; I just have a left sidebend and a long right rotation." But to myself I thought, "Duh, that explains so much." Growing up, my mom always had a "bad back." She spent most evenings lying on a heating pad on the couch. She "slipped" a disc getting a jar of mayonnaise out of the refrigerator when I was nine and stayed on that couch for two months. Years later, she had back surgery, which was "successful" until she tripped over a vacuum cord and the pain returned. After I became a Rolfing practitioner, I worked with my mom; we have similar spinal patterns.

BB: My parents took me to the doctor when I was eleven because I was complaining of neck and back pain. I remember having difficulty sleeping on the floor at summer camp. I was tall and felt embarrassed because my posture wasn't very good. That doctor told me to swim. I guess swimming helped because the curvatures didn't get worse, but I always felt limited. My father also had spine surgery but never complained of back pain; he was very athletic. The doctor gave me a set of daily exercises, which I never did. I appreciate where young people are coming from. So instead of using a lot of words to describe scoliosis, I try to help them feel – sensing how body tension affects patterns and how releasing this tension creates opportunities for change.

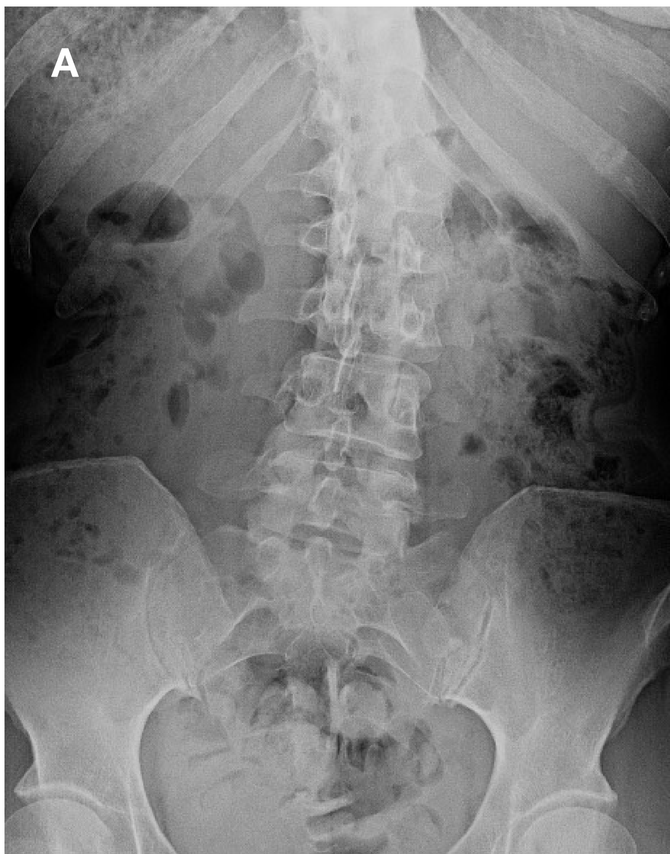
Thoughts about your scoliosis?

BW: The apex of my curve is in the thoracolumbar region but the sidebend starts in the lowest lumbars as you can see from the x-ray in Figure 1, image A. My pelvis compensates by sidebending right, in the opposite direction of the left sidebend in my thoracolumbar spine. This results in a fairly vertical looking carriage overall. People notice my uneven stride but rarely detect axial rotations unless they look closely. Yoga instructors and trainers miss it until I forward fold.

BB: I have a double-curvature. The right convex thoracic curve is about 28˚ and the left convex lumbar curve is about 22˚ (Figure 1, image B). Due to the torsion in my pelvis, my right leg has always felt longer. I have always had problems with my left sacroiliac joint, but my right hip can also be an issue. I always felt my main limitation started in my neck. Once, a memory surfaced: I clearly saw myself as a child being hit by a soccer ball and getting thrown into the air. I asked my mother; at first she thought it happened to my sister, but then she remembered it happened to me. It takes years to appreciate how our bodies compensate after some traumas.

BW: Also, I don't think most people appreciate how much these non-conscious compensations tax our resources. Structures that align major centers of gravity (head, torso, abdomen, knees, and feet) are better positioned for efficient body use, which can translate to subjective feelings of internal strength, connection, and emotional ease. Postures like ours that stray from segmental alignment expend extra energy just to remain upright. Unless they learn to use perception to experience internal balance, clients with significant scolioses are likely to feel tired and may beat themselves up for being 'lazy'. They rarely appreciate that their bodies are working overtime. It can be very healing to acknowledge the fatigue and explain why. These clients have often learned to ignore their bodies and soldier through, so teaching self-care is essential.

BB: I never felt symmetrical. Learning how to find support in standing was an important discovery in my Rolfing series. It was a revelation to sense inner expansion with a place to rest. Connecting with your inner strength feels powerful and affects the way you work with others and yourself. Rolfing sessions gave me the opportunity to work with my resources and not against them. It takes years. Nothing seems to be happening and then all of a sudden there's this *aha*



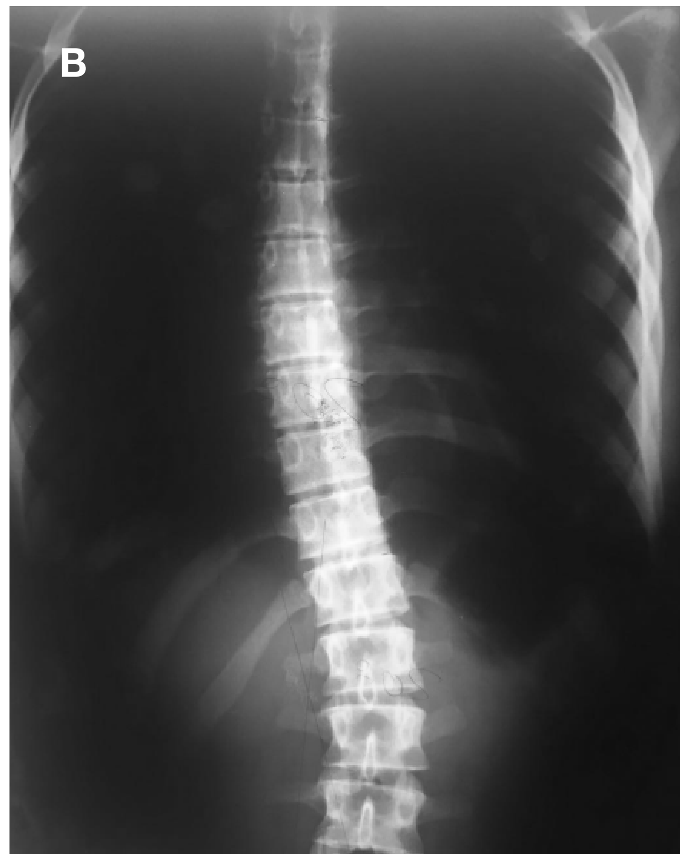


Figure 1: (A) Bethany Ward x-ray, posterior view, 2015; (B) Bibiana Badenes x-ray, anterior view, 1986.

moment when your body intelligence clearly makes a connection.

I've avoided writing about my scoliosis because when I tried, it came from an intellectual point of view. While I can talk about neuromyofascial manual techniques, coordination, balance, de-rotation exercises, and using the Ten Series for scoliosis, what it comes down to is that I am talking about myself. (Maybe I wasn't ready to show my vulnerability.) But the most important point I want to make is that as I started to sense and find these internal relationships, an internal peace appeared. What I'd considered limitations became potential. Even today there are moments of hesitation; but my own journey in my body has been and continues to be a treasured learning experience.

I feel lucky that I did not have to wear a Milwaukee Corset, because as a teenager I was already struggling with body image. I felt like the Hunchback of Notre Dame. I wanted to hide my body, which limited any natural sense of spontaneity or grace. Underneath it all, my intuition was still there, and I think I followed it to the best of my ability. I never even considered receiving or learning aggressive treatments; I somehow knew that wasn't the way. This is a very emotional point for me. We should never force scoliotic structures into preconceived alignments. The pattern will only go deeper into the body. Unless we teach clients to find internal support and expansion and listen to what the system is telling us, our work can do more harm than good. Our touch speaks volumes. Firm, steady touch builds unspoken trust.

Do you see a common physical pattern in teenagers with scoliosis?

BW: Research finds that most idiopathic scoliosis shows up in adolescence, affecting both boys and girls but at a much higher rate among females. Some estimate the ratio of girls to boys as eleven to one. What I see in my office is consistent with these statistics. It shows up in young people but is more common and often a more serious problem for girls than boys. Boys seem more likely to 'grow out of it' than girls. The most common pattern I see involves a left thoracic sidebend and right rotation, or what Bibiana referred to as a "right convex thoracic curve." This is easiest to see from behind when the client forward bends and the right ribs rotate posteriorly. The cervicals and lumbars tend to sidebend in the opposite direction, creating the common 'three-curve' scoliosis pattern (Lehnert-Schroth 2007).

BB: I also see more girls with scoliosis, but I see more boys with kyphosis.

BW: I see that too!

BB: Another common pattern I observe is limited range of motion in the neck and left-side vertebral fixations. I suspect that pediatricians could assess these neck restrictions and use them as early indicators of scoliosis before the spinal curves become established. Many children have episodes of being hit in the head and afterward seem okay. No major medical problems arise, but the body compensates with spinal anomalies.

Functionally, I also see a lack of hand-eye coordination. Working with coordination and spatial orientation is key to making progress with scoliosis. These clients tend to relate to the space on their left and right sides very differently. This uneven kinesphere affects how we move and can increase the scoliosis. Coordination exercises can be used to predict future muscle-tone discrepancies. I've also noticed that a high percentage of people with scoliosis wear glasses, orthodontics, and/or shoe orthotics.

Most clients with scoliosis are constantly fighting against gravity. Sometimes this seems to show up in their personalities. These clients are often quite hard on themselves.

Scoliosis is complex. Rolfing bodywork is particularly useful because it takes a holistic approach to the human being. Most modalities don't work with the whole person. It's why working with touch and movement is so powerful.

We know our embodiment affects our clients' experience. What have you learned from this?

BW: How we think about embodiment depends on the context. According to Rolf Movement Instructor Kevin Frank (2012, 5), embodiment is "what we know in our own bodies." Rolf Movement Instructor Lael Keen (2009, 25) emphasizes that embodiment "has to do with presence, and presence has to do with being at home in the body." When we work with embodiment, we are helping clients reconnect with what their soma knows and helping them more fully inhabit their bodies. This is particularly relevant for clients with scoliosis. What I consistently find is that clients struggle with balance and tend to have strong preferences for the ways they orient in the world. Clients often have a strong hand or eye dominance, or spatial awareness preferences (see Figure 2). Working with embodiment helps them find more functional balance, which supports structural shifts.

BB: Embodiment is also essential to teaching self-care. When clients are better in touch with what their bodies know, they make better choices about their activities. Practitioner embodiment is also very important; clients sense and learn from our presence. If clients feel safe, they can trust in their body's own ability to heal, change, and regulate. If practitioners are tense, we transmit our stress to clients and undermine their budding confidence. This is probably one of the things that make our work appealing to clients – they can trust the Rolfing approach because they can see and sense our own embodiment. From my own perspective, the more embodied I become, the better my results and the more I enjoy the work. Lastly, embodiment is particularly important for clients with scoliosis because these clients tend to be

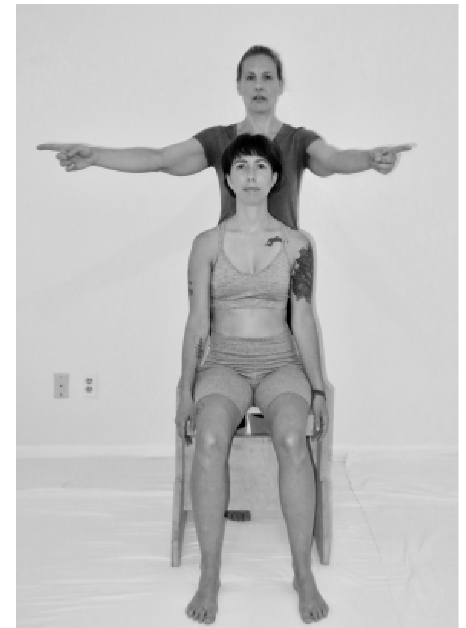


Figure 2: Clients with scoliosis often have strong hand or eye dominance as well as spatial awareness preference patterns. Some clients experience significant imbalances in perception, such as the client who sees further into her right periphery than her left. Remapping visual and spatial awareness, shown here by Bethany Ward, is an important part of our work.

obsessed with form. This is emphasized when medical doctors use labels and focus on curve angles. It's refreshing to work with a Rolfing practitioner who teaches integration and functional economy – especially if s/he has also faced similar challenges, as we have, with scoliosis.

How do you work with clients with scoliosis? Do you follow the Ten Series? How often do you see these clients?

BW: Although I usually follow the Ten Series with new clients, I might spend an initial session addressing 'low-hanging fruit'. By this I mean that if someone comes in with acute pain and I see obvious structural limitations that seem related, I might do one session to see if we can bring the whole system to a higher level of order (and comfort) by addressing glaring issues. I tell clients my thought process. Often, we can get them some relief, which may or may not hold, but may make our future sessions more effective. I believe the Ten-Series approach works really well as a way to start addressing scoliosis.

If I don't start with a breath session, it will be my second session. Working with breath is extremely important for these clients because one side of the rib cage is usually bigger (the side of the rotation) and another area needs depth. Working with breath, we can help clients develop awareness and expansion of these contracted areas. This helps release intercostal muscles so important to functional respiration and excursion of the rib cage. I pay a lot of attention to the wrapping of the superficial fascial layers, which gets really disorganized in scoliotic spirals. Unlike the traditional Rolfing Ten Series, I also incorporate compression techniques coordinated with the client's breathing to begin freeing up rib and vertebral relationships.

Session one begins an embodiment inquiry that we will build upon in all future sessions. As we teach our clients how to receive the work, one of the primary interoceptive skills is the ability to sense weight and volume. Both of these are critical for working with scoliosis clients. We started to speak to volume in our discussion of the rib cage. Volume is usually limited in certain areas in these clients – especially front/back depth around T5 and commonly one side of the rib cage. I also start working with clients' perception of weight. Scoliosis introduces functional leg-length differences and pelvic torsions, which make it impossible for clients to weight evenly through their legs. The inability to find easy support from the ground often influences clients to engage functional patterns that overemphasize the upper gravity center (G'), shoulder girdle, and neck in an attempt to 'hold themselves up'. Introducing a sense of weight and 'letting down' is often a profound experience and is fundamental for helping these clients access ease in their bodies.

And that's just session one! Here are a few thoughts for the following sessions:

- Session two: Clients with scoliosis often have one femur (often the right one) that acts like an 'internal' body type, and one femur (guess which?) that acts like an 'external' body type. As such, each foot needs a different approach. Foot work and dynamic sitting education (put your hand on the client's back and teach him/her to 'meet' your contact by extending his/her feet into the earth) is essential.
- Session three: This session is ideal for working with scoliosis because it provides a chance to address left/right differences from the side and work with convex and concave curvatures more specifically. More details are in the box "Working with Scoliosis in Sidelying" on page 37.
- Session four: When working with a pelvic torsion, the inner line of the leg is critical. This gives you an opportunity to address the asymmetries in femoral rotation. Save time for pelvic-floor education; many things that may seem obvious to you (like where your ischial tuberosities are) may require additional sensorimotor mapping for a client with scoliosis.
- Session five: If there are spinal rotations, the abdominal muscles are involved. The psoas on the side opposite the rotation is often tighter.
- Session six: This session allows you to do the work needed in the deep, small spinal muscles and ligaments. Don't just focus on the side of the rotation but make sure to spend time on the side with the sidebend, which tends to be less spacious. Request the client to breath into areas as you introduce fuller dimension. Consider putting the client in supported seated positions that allow you to better access the spine.
- Session seven: The head and neck are often compromised because of impaired support from below. Decouple head and eye movement. Also, in clients who have had extensive orthodontic work, cranial movement may have been impeded, which affects the ability of the spine to integrate and respond to challenges. Make sure the upper cervical spine is responsive enough to adapt to unwinding of the entire spine. Address head balance in standing.
- Sessions eight, nine, ten: There will be lots of cleanup and revisiting of previous themes needed for scoliosis clients, so the last three sessions are extremely valuable. Rethink what areas made the most difference. Did your client really benefit from work in the legs and feet? – this is common. What about the deep spinal patterns? You may want to emphasize prone spinal work. Or, challenges in the cranium and shoulder girdle may be important factors. As you complete session seven, you should know enough to strategize your final three integrative sessions. As we get to this part in the Ten Series, I talk with clients about how they may or may not want to use Rolfing SI in the future.

When I work with adolescent clients, we may see a shift in the progression of the scoliosis. That said, most of the scoliosis clients who come to see me are females between the age of thirty and fifty. Most of these clients use Rolfing sessions to help them manage their conditions and come in for sessions approximately every four to twelve weeks

BB: I agree with your Ten Series approach. My practice is different since most of my clients who have scoliosis are teenagers. In addition to the Ten Series, I put them in groups where I teach 'Body Intelligence' as soon as possible. These group sessions really improve their results.