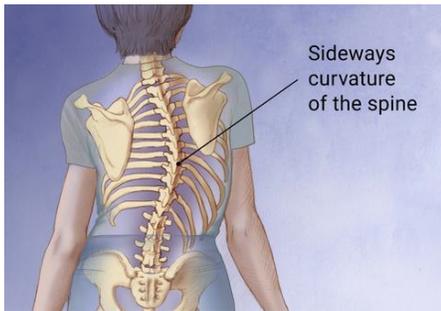


Scoliosis Specific Exercises

Over the past 10-20 years, our understanding of scoliosis has changed dramatically. Years ago, scoliosis was initially seen as a serious problem that needed aggressive action, often with bracing and surgical intervention. Ironically, it was not really even assessed until a patient was in their teenage years. I am not sure of this rationale but believe it relates to bone growth development – where the cartilage in the bone changes to bone (calcifies) – and this occurs approximately at ages 5-8 years old (primary boney growth center development) and 12-16 years old (secondary boney growth center development). My preference is to watch throughout child development for congenital, developmental, and ergonomic asymmetry.

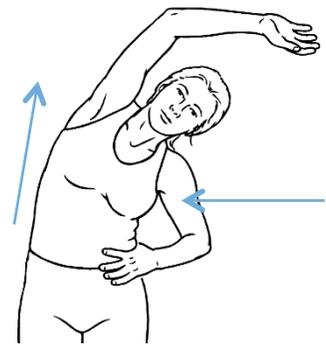


Due to current research findings we now are aware that function and how we use our body, may be more important than the genetics of how our body was formed. So having a scoliosis is not as important an issue as is how we use our body that has a scoliosis. A scoliosis can be pathological when it is severe enough that it is possibly affecting heart or lung function. In these cases aggressive action may be needed. However, being aware of a scoliosis early would allow for more conservative care, since scoliosis progression tends to be gradual. Essentially scoliosis self care, ergonomics, and exercises focus on learning how to use your body in a symmetrical manner building balance strength and flexibility.

The following is an overview of some exercises you can perform to help you become aware of your scoliosis. It is not an all-encompassing list of exercise nor does it substitute for chiropractic care with Dr. Blum or performing these exercises unsupervised. We all have a tendency to move in a direction and manner that is easiest and being aware of our tendencies is difficult without an “outside eye” watching. I would recommend going over these exercises with Dr. Blum or whomever he recommends so they can watch and guide you to move in a symmetrical manner. As you do the exercises it helps to do them in front of a mirror or someone you trust to monitor your movements.

1. **Side Opener:** If you have a right scoliosis (curve towards the right) at the rib cage level, place your hand on your right hip. If you have a left scoliosis place your hand on your left hip. Take your opposite arm over head and reach over while pressing in gently with your arm that is on your hip. Hold for 10 seconds.

For this exercise the goal is to feel the arm that is raised lift ceilingward continually as if to elongate the rib cage on that side while the hand reaches over towards the side of scoliosis. Try to feel the movement of the rib cage on the side of the hand holding the hip move toward the opening on opposite side. There will be a tendency to move your lower spine to the side of stretching. However the focus should be on the middle part of the spine moving instead. This will take practice and some guidance initially until you get the “feel.”



Left Sided Scoliosis at Rib Level

Scoliosis Specific Exercises

2. **Cat Cow Pose:** Get down on all fours on the ground with a neutral spine and neck. Starting at your tailbone lift up while dropping your belly down and lifting your head up to look forward. Hold for 3 seconds. Slowly arch your back like a cat and curl your tailbone under while looking towards your belly button. Hold for 3 seconds. Repeat the process 10 times.

While the above instructions are helpful for the average patient, a patient with scoliosis commonly will have a spiral to their curves, which will cause one side of the back to “protrude” backwards compared to the other side. So when you do this exercise think of moving your whole spine with the high side(s) down as the belly drops and the low side(s) up as you curl upwards. This will take practice and some guidance initially until you get the “feel.”

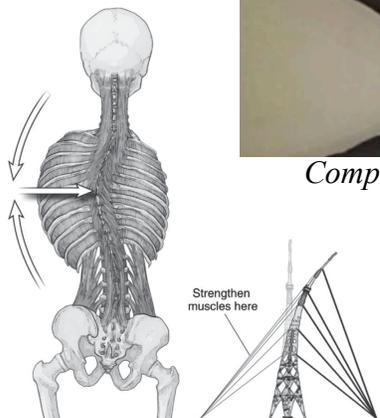


3. **Side Plank:** If you have a right scoliosis you would want to lay with your right side down, with the left convexity directed upwards. If you have a left scoliosis lay with right convexity directed downwards. Put your top leg in front and back leg in back to get good stabilization. Hold this position for as long as you can.

Perform daily.



Complex Scoliosis Patterns



Modified Plank Pose

For complex scoliosis patterns or “S-shaped” curves this can be helped by adding a second contralateral strengthening pose. To do this pose you will need to hold your free leg with your free arm or use a strap in your free hand around your free foot to hold your leg up. The goal is to attempt to bulge, most commonly, the upper thoracic (where the upper ribs attach) part of the spine upward. See: Fishman LM, Groessl EJ, Sherman KJ. Serial Case Reporting Yoga for Idiopathic and Degenerative Scoliosis. *Global Advances in Health and Medicine*. 2014;3(5):16-21. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4268609/pdf/gahmj.2013.064.pdf>]

Scoliosis Specific Exercises

4. **Superman:** Lay with your belly on the ball and all four arms and legs touching the ground. With your core holding tight and your neck in a neutral position, slowly raise your right arm and left leg at the same time. Hold for 3 seconds then slowly lower. Repeat on the opposite side. Perform 10 times on each side.

While the above instructions are helpful for the average patient, a patient with scoliosis commonly will have a spiral to their curves, which will cause one side of the back to “protrude” backwards compared to the other side. So when you do this exercise think of elongating your whole spine attempting to particularly tense the low side(s) up as you lift your arm and leg. This will take practice and some guidance initially until you get the “feel.”



5. **Back Extensions:** Lay with your belly on the ball and your feet against the wall. Place your hands lightly on the back of your head. Keeping your neck in a neutral position slowly raise your upper body up, hold for 3 seconds then slowly lower. Repeat 10 times.

While the above instructions are helpful for the average patient, a patient with scoliosis commonly will have a spiral to their curves, which will cause one side of the back to “protrude” backwards compared to the other side. So when you do this exercise think of elongating your whole spine attempting to particularly tense the low side(s) up as you arch your body upwards, focusing more on lengthening your head away from your toes then on arching your back. This will take practice and some guidance initially until you get the “feel.”

