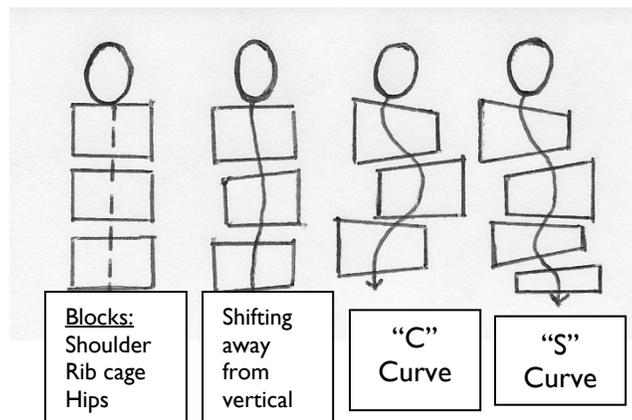


Home Exercise Program for Scoliosis

Scoliosis is a term used to describe any abnormal, sideways curvature of the spine. Viewed from the back, a typical spine is straight. With scoliosis, the spine can curve in one of three ways:

- The spine can curve to the left, shaped like the letter “C”
- The spine can curve to the right, shaped like a backwards letter “C”
- The spine has two curves, shaped like the letter “S”



The spine can be considered as building blocks, similar to the figure above. The long side of the block represents lengthening (stretching) of your muscles. The short end of the block illustrates shortening (contracting) of your muscles. Both extremes affect your ability to use your back muscles appropriately for posture and functional activities. It is important to attain and maintain a straight spine in order for your muscles to be used at their full functional level. To do so, you must become more aware of your body, especially your spine, in order to use self-correction to change your spine's position during daily activities.

For practice, the following exercises will focus on core strengthening, proprioception, and posture. Scoliosis exercises should be done carefully and performed with proper technique. Remember, the goal is to promote symmetry within the spine to regain trunk alignment.

1) Core Strength:

Your core muscles include your abdominal muscles, back muscles and muscles around the pelvis. These muscles are designed to protect the spine by creating a sturdy rod that limits excessive movement in any direction. Strong core muscles make it easier to do many physical activities.

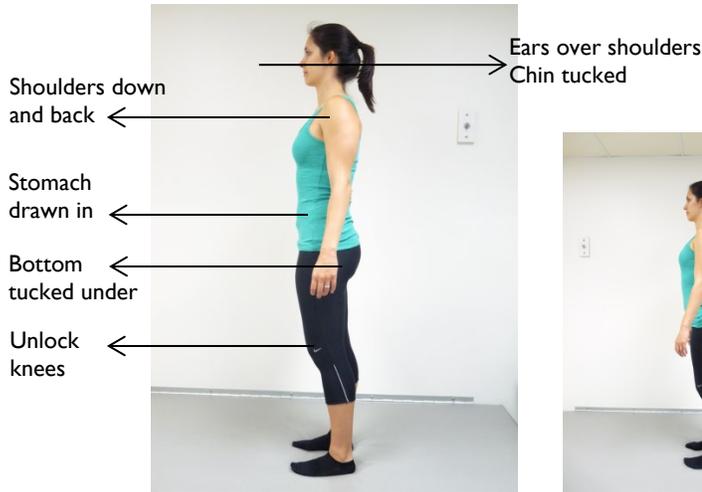
2) Proprioception:

Proprioception is the sense of the body in space regarding position, motion, and equilibrium. It uses receptors located in the skin, muscles and joints to build the internal sense of your body.

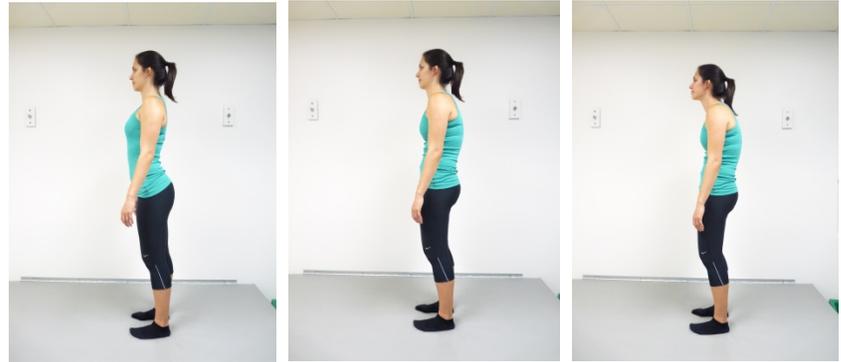
3) Posture:

Your spine is strong and stable when you practice healthy posture. But when you stoop or slouch, your muscles and ligaments struggle to keep your body upright and balanced. Poor posture can stress or pull muscles, which may lead to pain. It is important that you practice and maintain good posture throughout the day. The more you practice good posture, the more natural it will feel.

GOOD STANDING POSTURE



BAD STANDING POSTURE



Lumbar Lordosis Thoracic Kyphosis Forward Head

GOOD SITTING POSTURE



Ear over shoulder
Back straight
YES

BAD SITTING POSTURE



Slouching
Rounded hips
NO

Arching back
Sticking out chest
NO

Although good posture should be natural, you might feel stiff and awkward at first. The key is to practice good posture all the time: at home, school, riding in a car, eating a meal, etc.

EXERCISES

These exercises are general exercises that can be used prior to initiating a physical therapy program that will highlight individualized corrections for specific curves. They are not specific to Schroth treatment, but will improve proprioception, spinal mobility and stability.

- Pelvic Tilts
- Cat-Camel
- Double-Leg Abdominal Press
- Single-Leg Balance

1) Pelvic Tilts



Lying on back with knees bent and feet flat on the floor. Flatten back by tightening stomach muscles and buttocks. Hold for 5 seconds, breathing normally.

Repeat 10 times per set. Do 2 sets per session. Do 1 sessions per day.

2) Cat-Camel



On hands and knees, maintain tight abdominals with head straight (Photo 1). Take a deep breath in and lift your lower rib cage, round your back and relax your neck (Photo 2). As you breathe out, lower your chest towards the floor, looking slightly upward. Return to beginning position with tight abdominals.

Repeat 10 times per set. Do 2 sets per session. Do 1 sessions per day.

3) Double-Leg Abdominal Press



Lying on back with knees bent and feet flat on the floor (Photo 1), keeping your back in a neutral position. Raise your legs off the floor one at a time so that your knees and hips are bent at 90° angles (Photo 2, 3).

Push your hands against your knees while pulling your knees toward your hands, which will engage your abdominal muscles (Photo 4). Keep your arms straight! Hold for three deep breaths.

Repeat 10 times per set. Do 2 sets per session. Do 1 sessions per day.

4) Single Leg Balance

(If possible, perform in front of a mirror to help visualize a straight spine.)

**Hold for
10-20
seconds
Repeat
on both
legs**



With your eyes open, bend one knee up and balance on one foot. At first you may use your hands, like holding the back of a chair, table, or the wall. As balancing gets easier, take your hand(s) away and place them out to the side. Challenge yourself by bringing your arms across your chest. Close your eyes for an even greater challenge.

Repeat 5 times per set. Do 1 sets per session. Do 1 sessions per day.