

Conditions We Treat

Scoliosis

What is scoliosis?

Scoliosis, or curvature of the spine, often occurs when children are just entering puberty, which is a stressful enough time without also having to deal with a physical limitation. The cause is not always known, although rarer forms are connected to injury, muscular dystrophy or cerebral palsy. Yet through a range of treatments, including physical therapy, scoliosis does not have to be disabling — or even noticeable.

What is the Schroth Method?

The Schroth Method is a nonsurgical option for scoliosis treatment. It uses exercises customized for each patient to return the curved spine to a more natural position. The goal of Schroth exercises is to de-rotate, elongate and stabilize the spine in a three-dimensional plane. This is achieved through physical therapy that focuses on:

- Restoring muscular symmetry and alignment of posture
- Breathing into the concave side of the body
- Teaching you to be aware of your posture

What are Schroth exercises for scoliosis?

Scoliosis is a complex condition. From the back, it looks like a sideways curve in a C or an S shape. But what you don't see with a naked eye is how the vertebrae in the spine rotate as they form a curve. Spaces between the vertebrae may also become compressed in some areas and stretched in others. That's why physical therapy for scoliosis requires a 3-D approach to address the curve from all angles.

The spine rotation in scoliosis is different in each person. Schroth exercises are tailored to your unique curvature of the spine. The exercises can be performed while standing, sitting or lying down. Props such as therapy balls, poles and Schroth bars can also be used to assist in correcting scoliosis.

Schroth exercises, although different from person to person, include three important components:

Muscular Symmetry

The changes in the curvature of your spine also affect the muscles in your back. On one side of the back the muscles may weaken and waste away. On the other side, the muscles may be overworked and prominent. Schroth exercises are designed to address both problems, aiming to achieve muscular symmetry.

Rotational Angular Breathing

Breathing is an important part of the Schroth Method. The method uses a special breathing technique called rotational angular breathing. The idea is to rotate the spine with breathing to help reshape the rib cage and surrounding soft tissue.

Awareness of Your Posture

Katharina Schroth relied heavily on mirrors in her original practice. Mirrors helped her patients develop awareness of their posture. Being aware of the position of your spine is the first step to correcting it. Postural awareness is especially important when it comes to activities of daily living. If you have scoliosis, you will always need to be mindful of the position.

The main goal of Schroth exercises is to prevent scoliosis from advancing. Depending on your age, bone maturity and the degree of curvature, bracing may also be a part of the treatment. Schroth-specific breathing complements the bracing as children are taught to breathe within their custom brace. Managing scoliosis with the Schroth Method and bracing may be an option for patients who want to avoid surgery. However, a long-term commitment to the Schroth guidelines is necessary to make this treatment successful.

What are the warning signs of scoliosis?

In general, a lack of alignment in the upper body may indicate that a child has scoliosis. Specifically, if one hip and/or one shoulder looks higher than the other, or one shoulder blade seems to be more easily discernible than the other, scoliosis may be a factor.

In more advanced cases, back pain, a pronounced curve in the spine, or ribs that stick out noticeably on one side, can be a scoliosis indicator. Difficulty in breathing may occur, as your ribs press against one or both lungs.

What are the common treatments for scoliosis?

Children with moderate and severe cases of scoliosis will probably need more intervention than physical therapy alone. Bracing is common for moderate scoliosis. A severe case — or one which is treated after most growth has occurred — may call for surgery.

In mild cases, however, physical therapy may be enough. PT can additionally augment more aggressive treatment for moderate and severe cases.

How does physical therapy help scoliosis patients?

Your physical therapist can help you retrain your body to function more effectively with your particular alignment issues. In addition, physical therapy for scoliosis increases your range of motion, as well as builds strength in parts of your body which have been weakened through misalignment.

PT is also useful for scoliosis patients who have muscles and joints which have stiffened over time. Through massage therapy, your physical therapist will ease this tension, while redirecting movement. Electric

stimulation, ice and heat applications can also be beneficial for back pain and stiffness issues.

It's never too late to begin scoliosis physical therapy. **Call us** today for a consultation and treatment plan suggestions. Visit us at Ann Arbor, MI center.