Pediatric Orthopedics at Saint Anne’s Hospital

What’s behind scoliosis?

The human spine is a wonder of nature. Consisting of a row of 26 bones in your back, from the base of your skull to your pelvis, it supports your body’s weight and allows you to stand up straight and bend over. It also protects your spinal cord, a critical part of your central nervous system. A healthy spine has natural curves from front to back that are designed to distribute the body’s weight. However, occasionally, a condition called scoliosis can develop. In scoliosis – a word derived from the Greek skolios, or “bend” – the spine not only has natural front-to-back curves, but also a sideways curving of the spine. In other words, instead of looking like a straight “I” when viewed from the front or back, the spine’s sideways curvature makes it look more like an “S” or a “C,” or even a question mark.

Who develops scoliosis?

Jerald Katz, MD, chair of orthopedic surgery at Saint Anne’s Hospital, is a board-certified orthopedic surgeon who also completed a fellowship in pediatric orthopedic surgery. He notes that scoliosis affects 2 to 3 percent of the population, or an estimated 6 to 9 million people in the United States.

“Scoliosis can develop in infancy or early childhood,” says Dr. Katz, “but the common age of onset for scoliosis is 10-15 years old, when most children go through a traditional growth spurt.” Girls are more than three times as likely as boys to develop scoliosis, too.

Signs of scoliosis

“Most cases of scoliosis are mild and not cause any pain,” says Dr. Katz, “but in severe cases, the condition can be disabling.”

Symptoms of scoliosis include:

- uneven shoulders, or one shoulder that seems to be more prominent than the other
- uneven waist
- uneven hips

In rare cases, someone with scoliosis may experience ribs that stick out more on one side than the other or back pain. They may also have trouble breathing or heart problems, since severe curvature can reduce room in the chest and limit lung and heart function.

Diagnosing scoliosis

Most children’s primary care providers and elementary and middle schools provide routine screening for scoliosis. If scoliosis is suspected, a simple X-ray can diagnose it and show its severity. If the child’s healthcare provider thinks there may be another cause for the scoliosis, an MRI, CT scan or bone scan may also be ordered.

Treating scoliosis

Treatment is decided on an individual basis and depends on symptoms. Common conservative treatments include bracing and pain medication. For back pain related to muscle imbalance and weakness associated with scoliosis, moist heat and exercise may be useful.

If pain is persistent, or the spine’s curvature is severe or causes deformity, surgery to help correct the spine may be considered. Surgical options may include spinal fusion and use of instruments such as rods, wires, screws and other devices.

Dr. Katz, whose expertise includes pediatric orthopedics, notes, “For more than 20 years, Saint Anne’s has been one of only a few community hospitals that have demonstrated the expertise to successfully manage the surgical aspects of scoliosis.”

Saint Anne’s Hospital’s Fernandes Center for Children & Families offers comprehensive rehabilitation services for children of all ages. For more information, call 508-235-5285.

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