PARENTS: UNDERSTAND ADOLESCENT IDIOPATHIC SCOLIOSIS

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What is adolescent idiopathic scoliosis?

Scoliosis is the lateral curvature of the spine (SP), which appears during puberty, and may affect the thoracic and lumbar spine. Idiopathic scoliosis is more common in girls and divided into infantile, infant-child and adolescent. Adolescent scoliosis is the most common type. The boy-girl ratio is 1 to 9. The usual age of scoliosis onset is between 9 to 13 years.



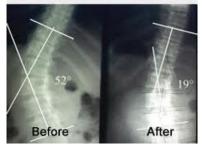
What are the causes of adolescent idiopathic scoliosis?

The curvatures shown in adolescent scoliosis may be structural or functional. There is no spine rotation around its axis in functional scoliosis, while in structural scoliosis, there is a spine rotation around its axis. Functional scoliosis occurs due to poor posture when standing, walking, and sitting or because of habit. Structural scoliosis is idiopathic in 80% of cases. The exact etiology of scoliosis is still unknown.

Who can diagnose adolescent idiopathic scoliosis?

The orthopedist is a qualified doctor who can diagnose scoliosis by measuring the rotation degrees of the spine around its axis with a radiograph (X-Ray). The pediatrician also can diagnose scoliosis and refer to an orthopedist. The school health service of the Ministry of Health plays a vital role in scoliosis early detection in public schools. Every year, health visitors apply scoliosis measurements in fifth and sixth-grade elementary school students until the third grade of the secondary school of public schools. In case children have signs of scoliosis, they are referred to orthopaedic and parents are informed.

Before and After Treatment



How can parents observe their children for adolescent idiopathic scoliosis?

Parents themselves can observe their children and see symptoms of scoliosis, which are the following: a) one shoulder is higher than the other; b) one scapula is more protruded than the other, c) ribs of one side are elevated and/ or protruded, d) hip of one side is protruded or elevated than the other, and e) pelvis/ waist asymmetry.

How to treat adolescent idiopathic scoliosis?

The goal of any treatment aims to prevent deterioration of scoliosis. The orthopedist is the qualified doctor who decides the treatment according to the degrees of rotation of the spine on x-ray. For scoliosis, 20-40 degrees may require a brace and for more than 40 degrees may need surgery. If scoliosis does not exceed 20 degrees, periodic monitoring is followed by orthopedic every 4-6 months and systematic kinesiotherapy.

No parent wants their child to reach such severe levels. Therefore, the treatment of scoliosis is necessary to prevent rapid deterioration during growth spurt, particularly in girls with the onset of menstruation.

The kinesiotherapy in idiopathic scoliosis includes Schroth method exercises, postural exercises, flexibility exercises, strength exercises for spinal muscles, and correcting exercises for the muscles' imbalance.

In addition to the general program of kinesiotherapy, body awareness exercises are practiced in all positions. In some of them, the patient observes correct posture in front of the mirror.

Teenagers are highly reactive during this period of their life, and it is crucial that everyone involved in scoliosis treatment be cautious in their approach. Teenagers will follow their rehabilitation program easier in a structured environment through adapted exercises with an experienced and qualified therapist. The approach to a teenager is very different from that in an adult.

Considering the above mentioned, appropriate conditions must be created and applied in an environment that motivates teenagers to learn their bodies and keep the correct body posture through a correct rehabilitation program.