

# idiopathic scoliosis

Scoliosis is a curve of the spine measuring more than 10 degrees. Idiopathic means the cause is unknown. While there are different types of scoliosis, idiopathic scoliosis is the most common form affecting children and adolescents. Scoliosis is not caused by bad posture, diet or backpacks.

## Who is at risk?

- Approximately 2 to 4 percent of the population may have a curve of more than 10 degrees.
- There are three to four times as many girls than boys with curves more than 10 degrees.
- Most curves under 30 degrees have little progression during adulthood. Less than 1 percent of the population develops a curve greater than 30 degrees.
- Nearly 7 percent of scoliosis patients have a sibling or parents also affected by scoliosis.

## When does the curve progress?

- The curve is most likely to increase during rapid spine growth.
- The most rapid spine growth for girls generally happens just before and leading up to the start of menstrual cycles.
- In most girls, spine growth slows and ultimately stops two years after the start of regular menstrual cycles.
- In adulthood, the curve progression slows, but could accelerate during pregnancy and menopause.

## What are the symptoms?

- Back pain may occur. However, the pain experienced by scoliosis patients may be comparable to that of the general public.
- Having noticeable posture deviations, such as uneven shoulder heights, one shoulder blade being more prominent, uneven hip heights, leaning to one side and uneven leg lengths.
- In severe cases, difficulty with breathing.

## What are the treatment options?

### Non-surgical treatment:

- Monitor the curve with physical examinations and X-rays to watch for curve progression.
- Use a plastic brace that may help stop the curve from increasing.
- Exercise and physical activity is encouraged. Strong core (trunk) muscular strength builds bone mass, muscle mass and may help the appearance of the curve.
- Building strong core muscle strength and flexibility lessens the chance of back pain.
- A referral to physical therapy to address pain, core strength, flexibility and to recommend training conditions could be beneficial.



### Surgical treatment:

- Surgery is used for larger curves that will continue to progress throughout life.

## What is the time frame for returning to activity/sport?

- Patients with scoliosis are able to participate in all activities.
- If surgery involving a spinal fusion is required, contact sports will be restricted.
- All other non-contact activities and sports may be resumed about six months after surgery, depending on the physician's instructions.

## What are the long-term side effects?

Patients are able to live productive lives. Core strengthening and physical activity are important during a lifetime and will minimize back pain and encourage a sense of well-being. Only the most severe cases with curves of more than 80 degrees cause difficulty with lung function in otherwise healthy patients.