

物理醫學  
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PHO02E1HE-03-112016

# Scoliosis



養和醫院  
Hong Kong Sanatorium & Hospital

義肢及矯形服務

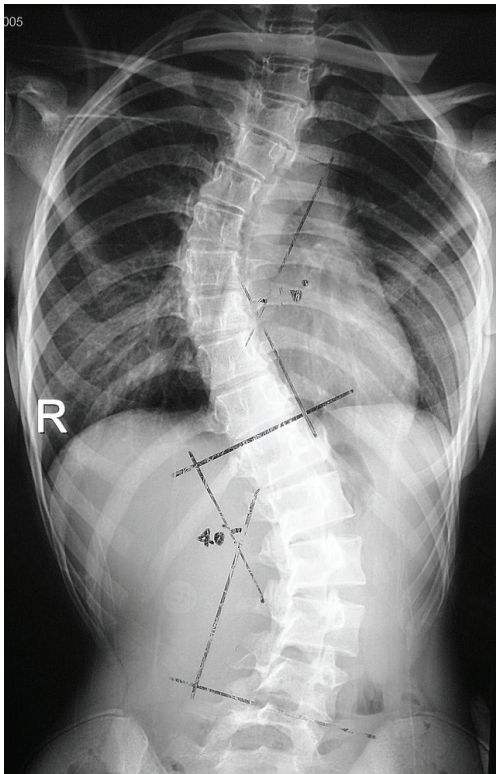
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# What is Scoliosis?

The spine is composed of 33 vertebrae. It is an essential part of the body that provides attachment for muscles, keeps the body upright and protects the spinal cord. A healthy spine should align straight when seen from the back. Any lateral curvature over 10 degrees (giving the spine an S or C shape) is defined as “scoliosis”.

The commonest type of scoliosis is “idiopathic scoliosis”, which means the cause is unknown. Statistics show that girls are 2 to 3 times more likely to have the problem than boys.

Deterioration of scoliosis is common during puberty. Once bone maturity is reached, the chance of further deterioration is low.



# Consequences of Scoliosis

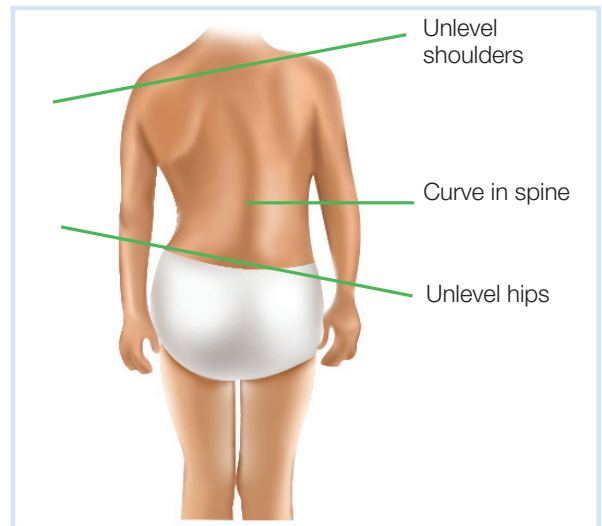
- Scoliosis affects growth and posture and may have an adverse psychological impact on the adolescent patient
- In severe cases, scoliosis may affect lung function and lead to difficulty in pregnancy and delivery

# Self-assessment

Scoliosis can go unnoticed in a child because it is rarely painful in the formative years. Therefore, parents should watch for the following signs of scoliosis:

1. Unlevel ears
2. Unlevel shoulders
3. Unlevel scapulae (shoulder blade)
4. Unlevel hips or abnormal waist line

Another way is to ask the child to bend forward, keep his/her knees straight and position both hands between the knees to assess the symmetry of the back from behind.



## Treatment

Treatment for scoliosis depends on a number of factors including the severity of the curve of the spine.

**10 - 25 degrees:** Exercise/physiotherapy followed by regular check-up (usually twice a year).

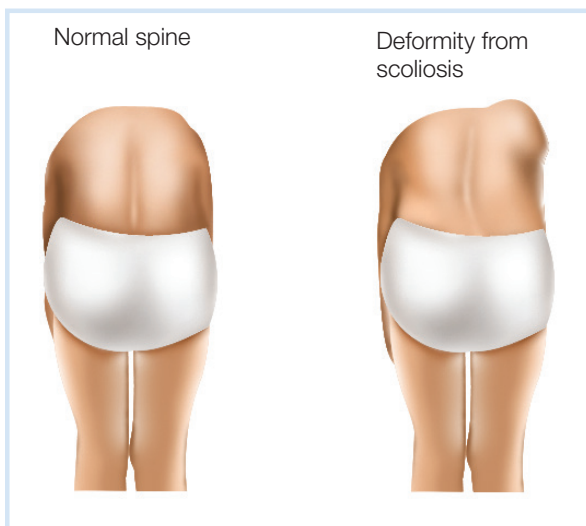
**25 - 40 degrees:** Bracing and exercise/physiotherapy are needed. Scoliosis braces are tailor-made to fit the body of individual patients. The design varies and depends on the type and severity of the deformation.

**40 degrees or above:** Surgical treatment is often required to correct the problem or prevent deterioration.

## Spinal Brace for Scoliosis

Spinal braces correct moderate scoliosis by exerting mechanical forces on specific regions of the spine. As spinal shape changes rapidly during puberty, braces should be worn for 23 hours daily until the bone is matured (around the age of 16 - 18), with follow-up examinations performed twice a year. In addition, the brace should be adjusted or renewed every 6 to 12 months to render the optimum therapeutic effect.

For further information about the spinal brace and surgical treatment, please feel free to contact us.

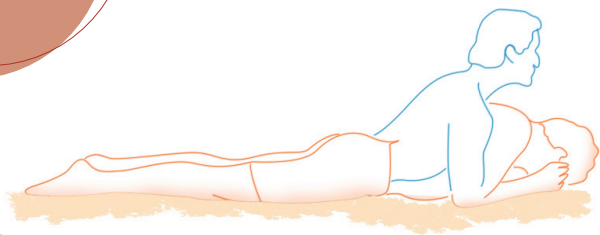


# Exercises for Scoliosis

1

## Hyperextension A

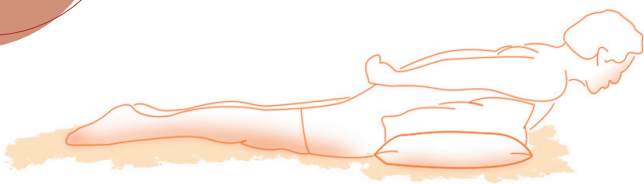
Hold 5 to 10 seconds, repeat 10 times.



2

## Hyperextension B

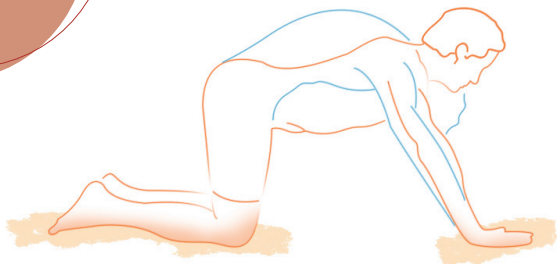
Hold 3 seconds, repeat 10 times.  
(Suggestion: pillow supporting abdomen)



3

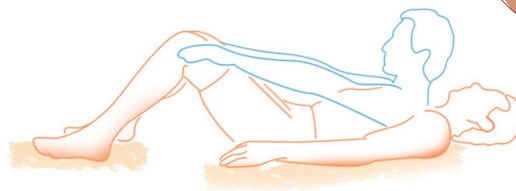
## Angry Cat Stretch

Hold 3 seconds, repeat 10 times.



## Sit-up Pelvic Tilt

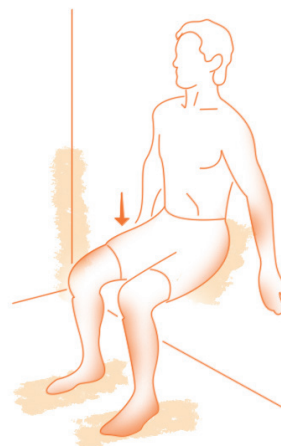
Hold 5 seconds, repeat 10 times.



4

## Wall Exercise

Stand straight with back against the wall (no space between the waist and the wall). Spread feet out in front and slightly wider than shoulder width. Slowly lower buttocks by sliding down wall until thighs are parallel to floor. Hold 3 to 5 seconds, repeat 5 times.



5

## Breathing Exercise

Deep breathing exercise maintains lung function and prevents it from deteriorating due to scoliosis.

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