

SCREENING FOR SCOLIOSIS

A Guide for physicians

Research Shows

Scoliosis is a common condition and affects approximately 3% of the general population worldwide. Girls are more prone to develop Scoliosis. They are affected **5 times** more commonly than boys.



Scoliosis increases in magnitude with growth.

Curves over 50 degrees progress even after skeletal maturity

Untreated Scoliosis show increased mortality, increased CVS disease, increased respiratory failure and increased lumbar osteoarthritis.

Most people have mild curves that do not require operative intervention. Unfortunately, 1 to 3 children out of every 1000 have Scoliosis severe enough to require surgery. As per studies it is estimated 1 lakh people in India will need surgery annually for Scoliosis.

In children who have Scoliosis, it is extremely important to identify the condition very early. Early treatment (before the curves become severe) is extremely beneficial to the child and gives a good long term result.

It is important that the Scoliosis be detected early and not allowed to progress. This is done by a variety of methods including casting, bracing, and surgery. Children who present with severe deformity in advanced stages of the disease need extensive surgery and suffer a much higher morbidity. Scoliosis does not lead to cosmetic deformity alone. Scoliosis, if left untreated, results in diminished pulmonary function due to poor lung development. This results in restrictive lung disease, decreased cardiac function, and limitaion of physical ability.



Severe Congenital Kypho-scoliosis in a 12 year old boy.

Since early intervention has such huge benefits for children suffering from **Scoliosis**, it becomes imperative to screen all susceptible age groups.

Thankfully, screening is a simple process with high sensitivity. It consists of a clinical test called the 'Adams Forward Bending Test'.

- Make the child stand up and face away from you.
- You should sit or stand behind the child.
- Ask the child to bend down and touch their toes keeping the knees straight.
- Watch the symmetry of the back.

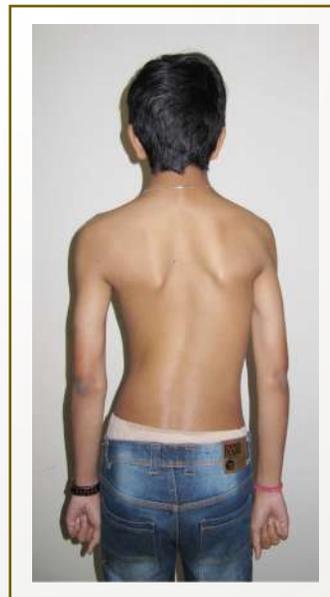
A CHILD WITH SCOLIOSIS WILL SHOW AN APPARENT HUMP.

Please refer to the image on right indicating Adam's Forward Bend Test. It shows the rib hump on forward bending.

A mild case may only show a difference in the level of 2 sides of the back. A positive finding is an indication for an X-ray whole spine PA standing view, and referral to a Scoliosis center.

Other findings may be evident:

- The patient may lean to one side.
- One shoulder may be higher than the other.
- There may be a deep depression on one side of the waist.
- One leg may appear shorter.



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