What is Scoliosis?
Scoliosis is a lateral (sideways) curvature of the spine. The spinal column curves and twists causing problems which can also extend to the ribs and pelvis.

For the majority of children this is very mild and no treatment will become necessary. For the small minority that need treatment an early diagnosis is important to prevent further problems from developing.

Scoliosis is rarely painful in children. It can increase quickly during growth spurts. It is best treated whilst the patient is young as the body responds better to treatment whilst it is still growing.

What Causes Scoliosis?
- In 80% of cases the cause is unknown (idiopathic)
- Abnormal development of the bones in the spine, which is present at birth, can cause scoliosis
- Many conditions affecting the neuromuscular system (nerves and muscles) can cause scoliosis

There is no known way of preventing scoliosis from occurring, and when it does occur it is no-one's fault.

Signs of Scoliosis
- One shoulder may be higher than the other
- One shoulder may be higher and more prominent than the other
- One hip may be more prominent than the other
- Clothes may not hang properly

How is Scoliosis Treated?
Scoliosis is treated to prevent worsening of the curve and also for cosmetic reasons. The treatment will depend upon the severity of the curve, the age of the child and if it is interfering with breathing.

The types of treatment are:
- Observation
- Bracing
- Surgery

Observation
For many children this will be the only treatment needed as most curves do not become severe. A series of Xrays and Formetric scans (a light scan of the back surface) will be taken over time. Comparisons will then be made to establish if the curve is worsening and if so, how quickly.

Generally, patients who have a lot of growth left have a higher risk of curve progression.

With all this information the Consultant is able to decide whether to continue to observe or to prescribe bracing or surgery.

Bracing
Bracing can be used if the curve measures usually between 20 and 40 degrees. The purpose is to control the curve and to slow down its development. The curves are monitored at regular intervals throughout the time the brace is worn.

The most commonly used brace is called a ‘Spinecor’. This is made up of fabric and elastic sections which are held in place by velcro straps. The child and parents are taught how the brace should be worn to obtain optimum result and it is difficult to detect when worn underneath normal clothing.

A less common form of bracing is produced after taking a plaster cast of the child’s back from which a rigid jacket is made. Whichever type is prescribed the Orthotic department will take care of supplying and fitting the brace. They are available to answer any questions and deal with any problems in relation to bracing.

Surgery
Surgery is usually performed if the curve is over 50 degrees or will be when you child is fully grown.

There are two main types of surgery:
- Anterior fusion – this is performed through an incision on the side of the chest wall. This may involve the use of metal instrumentation to correct the curve.
- Posterior fusion – is performed through an incision at the back and involves the use of metal instrumentation to correct the curve.

One or both of these procedures may be needed and the surgery will be done in one or two stages. Your Consultant will discuss this with you in detail.

Should surgery be needed you may find the following leaflets helpful:
- Pre-Op Assessment for Spinal Surgery- No.227
- Spinal Surgery and Discharge Information – No.228

Are there any long term effects of scoliosis?
As scoliosis can arise in many different conditions:- eg.
- Idiopathic
- Cerebral Palsy
- Syndromes
- Skeletal dysplasia

Your consultant will discuss your own personal long-term effects, in clinic

Most Important
If you have any questions or problems however trivial they may be – ASK. There are contact numbers on the back cover or write your questions down prior to your consultation.
SCOLIOSIS

For further advice contact:

Main hospital number: 0114 271 7000
Patient Advice & Liaison Team (PALS)
The Children's Hospital
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Sheffield
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