ADOLESCENT SCOLIOSIS
SPINAL CURVATURE

The National Self-Detection Program

Information for schoolgirls in years 7 and 9 and their parents

A health promotion program recommended by the Spine Society of Australia. The program is endorsed by the Paediatrics and Child Health Division of the Royal Australasian College of Physicians.

WHAT IS SCOLIOSIS?
Scoliosis is a lateral or sideways curve of the spine. The spine also rotates on its long axis as it curves. It usually develops during early adolescence (age 10-13 years) when growth is most rapid.

WHAT IS THE CAUSE OF SCOLIOSIS?
The cause is unknown, but 80-90% of cases occur in otherwise healthy adolescents. This is called idiopathic (cause unknown) scoliosis.

We know that scoliosis is NOT contagious and NOT caused by bad posture, a soft mattress, carrying a heavy school bag or junk food.

WHY IS EARLY DETECTION IMPORTANT?
While very small curves are common and of no significance, about 2% of girls have a curve which warrants medical observation during the growth period. Three girls per 1,000 will require treatment during the growth phase. If treatment is required, the earlier it is undertaken, the better the long-term result. This is the basis for screening since in the early stages scoliosis produces no symptoms. The way to detect scoliosis is to look for it!

WHY THIS BROCHURE HAS BEEN PRODUCED
This brochure is designed to make parents of schoolgirls aware of the outward signs of scoliosis. From time to time all government and non-government schools in Australia will be asked to download this brochure from www.scoliosis-australia.org and to distribute it to girls in Years 7 and 9 (11 and 13 years of age in most states and territories).

If after reading this brochure you or your parents think you may have this condition, please consult your family doctor.

WHAT ARE THE OUTWARD SIGNS OF SCOLIOSIS?

- Head not centred over body
- One shoulder higher
- One shoulder-blade higher and possibly more prominent
- Spine obviously curved
- Unequal gaps between the arms and the trunk
- One hip more prominent
HOW SCOLIOSIS IS DETECTED
Apart from the outward signs with a teenager standing as illustrated, the reliable Forward Bend Test is used in the diagnosis of scoliosis. This simple visual examination requires the teenager to stand with the feet together and parallel and bending forward as far as she can go with the hands, palms facing each other, pointed between the two big toes. In scoliosis, one side of the upper chest (thoracic) region or the lower back (lumbar) region will be more than 1 cm higher than the other. The prominence is most often on the right side in the thoracic region. If the difference between the two sides is less than 1 cm, it is highly unlikely that a significant curvature is present and the difference is simply due to asymmetrical growth of the two sides of the body. This is called torso asymmetry and is of no significance.

WHAT ABOUT BROTHERS AND SISTERS?
Scoliosis tends to run in families. When a curve is detected in one member of the family, other children should also be examined by the family doctor. If there is a history of a blood relative, especially a female cousin, having been treated for scoliosis by brace wearing or surgery, then this strengthens the case for spinal examination as a regular health check between 10 and 13 years of age.

Scoliosis which requires treatment is far less common in boys than in girls. The ratio of boys to girls requiring treatment is about 1 to 10.

IS TREATMENT SUCCESSFUL?
Yes, modern methods produce excellent results when a curve is detected early. In most cases an inconspicuous spinal brace is worn. Surgery is needed in only one out of three cases which require treatment.

There is no scientific evidence that physical therapy (exercise programs) and spinal manipulation (chiropractic adjustments) will either correct a scoliosis or halt its progression.

WHAT WILL HAPPEN IF SCOLIOSIS IS NOT TREATED?
The curve may increase unnoticed during the growing years. Moderate and severe curves may also increase in adult life. Some curves may increase with pregnancy. Severe pain, physical deformity and wear and tear arthritis may occur during middle life. Early detection is important for a healthy future.