



Scoliosis and its Treatment

What is Scoliosis?

Scoliosis is a deformity and curvature of the spine that affects particularly adolescents. Its causes can be congenital or neuromuscular and it can be associated with other syndromes. However, for the majority the cause is still unknown i.e. idiopathic. The problem is more common in girls and tends to deteriorate most rapidly during the child's growth spurt. The onset of scoliosis is insidious and it causes no pain, which is why it has often been undetected until it reaches a severe stage requiring surgery.

Treatment

If left undiagnosed or untreated, the deformity may progress and lead to complications including cardio-pulmonary restriction, back pain and not least cosmetic and psycho-social problems in children who are already at a sensitive period in their lives. Currently, the treatment of scoliosis can be wearing brace or by surgery. Mild scoliosis can be effectively treated by wearing appropriate brace so that major surgical procedures can be avoided. For more severe cases, patients may have to wear brace and even undergo surgical procedure to prevent further progression of deformity.

The Prevalence of Scoliosis in Hong Kong Children

The Department of Orthopaedic Surgery, Faculty of Medicine, the University of Hong Kong followed the cohort of the referred children for 6 years (from 1995 to 2002). It was found that the prevalence of scoliosis in Hong Kong was 4.5 per 1,000 students and girls were found 6 times more common than boys. The prevalence of scoliosis is similar to other regions such as USA, Japan and Sweden. Most of the patients were 10 to 16 years old. The Department has already found some preliminary evidence that one of the chromosomes may be implicated but further studies are needed.

Some parents and students may have a misconception that the weight and type of school bag, sitting and standing postures may lead to the development and progression of scoliosis. However, the Department and other international journals find there is NO causal relationship between them.

School Screening Program for Scoliosis in Hong Kong

The Department of Orthopaedic Surgery, Faculty of Medicine, the University of Hong Kong at the Duchess of Kent Children's Hospital has been a pioneer in the treatment of this disease. It is the *First* hospital designated by Hospital Authority to be scoliosis treatment and referral center in Hong Kong and has 50 years experience in treating scoliosis. With the collaboration of the Department of Health, a **SCOLIOSIS SCREENING PROTOCOL** has been incorporated into the **ANNUAL COMPREHENSIVE HEALTH ASSESSMENT** for all primary school children since 1995. With the Scoliosis Screening Program, the number of patients who needed surgery throughout the years is significantly reduced.