Bones—diseases

Debunking the school bag myth

Carrying heavy bags daily is not linked to scoliosis in children, writes

New Straits Times · 5 Apr 2022 · 23 · Dr Lim Sze Wei The writer is a consultant orthopaedic and spine and trauma surgeon at Alty Orthopaedic Hospital.

Although heavy bags do not cause scoliosis, using them incorrectly or for prolonged periods can cause other forms of spinal problems, such as back pain, bad posture, muscle weakness and fatigue.



THE subject of heavy school bags has long been debated and the health issue that is commonly associated with it is scoliosis, a curvature of the spine that is often diagnosed in adolescents. In Malaysia, studies suggest that scoliosis affects two to three percent of the population, between 600,000 and 900,000 people.

Scoliosis usually affects teenagers from the ages of 10 to 17 during their growth spurt. The curves are often C-shaped or S-shaped and anything that measures more than 10 degrees on an X-ray is considered scoliosis.

Possible complications of scoliosis include chronic pain, breathing difficulties and a reduced capacity for exercise.

ARE HEAVY BAGS BAD?

For many years, people have mistakenly believed that heavy bags can cause the spine to curve. However, research and medical reports have noted no associations between the occurrence of scoliosis and heavy school bags.

They also don't support the idea that heavy bags can structurally change a child's growing spine. Although heavy bags do not cause scoliosis, using them incorrectly or for prolonged periods can cause other forms of spinal problems, such as back pain, bad posture, muscle weakness and fatigue. For one, scoliosis is not caused by carrying heavy school bags or anything a child or parent did or did not do.

Scoliosis can occur in people with conditions such as cerebral palsy or muscular dystrophy but in most cases, scoliosis is idiopathic, which means there is no known cause.

However, most cases occur when a child reaches his or her growth spurt at the age of 10 and older. Girls have a higher risk of developing scoliosis than boys and family history is also important. Scoliosis can be inherited genetically.

Most cases of scoliosis are mild, but some curves worsen as children grow and severe scoliosis can be disabling.

HOW TO SPOT SCOLIOSIS

Scoliosis can worsen very quickly during adolescence because the child is growing rapidly during this period.

The symptoms are also not always obvious in mild cases, so, it is important that parents check their children from time to time. The earlier it is detected, the better the odds of preventing scoliosis from causing serious issues down the line.

The good news is parents can easily check for signs and symptoms of scoliosis at home. One of the most prevalent signs of scoliosis that can be observed include a difference in the height or position of shoulders, shoulder blades or hips. For example, one shoulder seems to be consistently drooping below the other. Another sign is the head is not centred with the rest of the body.

Parents may also do a quick "Adam's Forward Bend Test" to see the curvature of the spine. They can do this by asking their children to bend forward with both palms between the knees. Any disparity in the rib cage or other deformities along the back could be a sign of scoliosis.

If there is a suspicious situation, it is necessary to consult a doctor immediately.

TREATMENT OF SCOLIOSIS

For mild scoliosis, non-surgical treatment methods such as exercise and bracing can help slow or stop the progression of the curve, and it can also relieve back pain associated with the condition.

However, these methods cannot fix the curvature in the spine and patients will need to be monitored throughout their lives to ensure the condition does not worsen.

Surgery is only necessary if the curvature is severe and interferes with the patient's quality of life. Advances in surgical methods have made for a safe and effective procedure, with much shorter recovery time than were associated with scoliosis surgery in the past.

It is critical that new scoliosis cases continue to be treated as quickly as possible, notwithstanding the Covid-19 pandemic.

In adolescent cases particularly, even a few weeks can make a significant difference to the path of treatment as well as the potential outcome. The pandemic may have put a stop to many activities in our lives, but it hasn't stopped kids from growing.

With routine check-ups and timely intervention, conditions like scoliosis can be managed better, giving children a better quality of life.