

Scoliosis

The term 'musculoskeletal' refers to muscles and bones, and there are a range of common problems with muscles and bones that people with physical disabilities may experience.

Scoliosis refers to a curvature of the spine. It means there is more than a 10 degree curve of the spine on an x-ray of the spine.

Scoliosis can occur in 15% to 80% of people with neuromuscular conditions. Those with spasticity across their whole body are most at risk.



Spinal curvatures may become worse with age and monitoring of scoliosis is essential to catch changes before they become worse.

The effects of scoliosis in cerebral palsy

- **Pain** – particularly in the back and shoulders.
- **Windswept deformity** – described a person's position where the knees go to one side and it is very difficult to move or control the knees to go to the other side. The pelvis also often does not position properly.
- **Rib changes:** changes to the positioning of the rib cage may result in parts of the ribs rubbing against areas such as the pelvis, causing pain, skin breakdown and pressure injuries.
- **Positioning difficulties:** the above positions may make it difficult to sit or lie down. There is an increased risk of hip displacement and pressure on one side of the bottom which can cause skin breakdown or injury (e.g. ulcers).
- **Respiratory and gastrointestinal problems:** a scoliosis may affect how your organs work making it harder to take deep breaths, cough, swallow and digest food. Chest infections, heartburn, reflux and constipation are often experienced by people with scoliosis.
- **Swallowing problems and underweight:** often experienced by people with scoliosis who do not stand or walk.



Scoliosis cont.

Options to manage scoliosis

Non-surgical options for management of scoliosis include customised seating systems that provide external support to the spine, spinal bracing, or a combination of both.

Bracing

During the growing years, spinal bracing can reduce the size of spinal curvatures and slow rates of progression to larger curves. It is unclear whether bracing can completely stop curve progression.

While the full effects of a brace on spinal curvature changes in adulthood are not known, a spinal brace can help to improve sitting and the ease of positioning. Preferences around wearing a brace are entirely individual: while some find comfort in wearing a brace, others find bracing too uncomfortable to wear. Monitoring and a team approach - including an orthopaedic surgeon, orthotist, physiotherapist and occupational therapist - is recommended for any decision making around bracing into adulthood.

Customised seating

Customised seating means that the support you have in your chair is made just for you, supporting your body in the way it needs to be supported. Physiotherapists and occupational therapists prescribe seating that best supports you. These supports aim to slow progression of spinal curvatures however are unlikely to stop progression: the strength of spasticity, effects of gravity on the body and the need to allow movement and comfort mean that it is not possible to completely stop the body from changing.

Surgical options

In some cases, an orthopaedic surgeon may recommend a spinal fusion. Your surgeon will discuss the surgical options with you in detail.



What do I do if I have or am at risk of scoliosis?

Have a review with your physiotherapist every year to pick up and manage any changes. People of all abilities can develop scoliosis, everyone with a physical disability is recommended to see a physiotherapist for a yearly review.

Have yearly reviews of equipment and positioning during the day and night by your physiotherapist and occupational therapist. Your needs can change at any point.

Have a review of your swallowing yearly with your speech pathologist to make sure you swallowing safely. Swallowing ability can change at any point.

Have a review with a dietitian to make sure you get the right amount of food.

Visit futurethinking.abilitycentre.com.au for more information.