

## Scoliosis Fact Sheet

### What is Scoliosis?

Scoliosis is a condition where the spine curves sideways, and also rotates on its vertical axis, often forming an "S" or "C" shape. It can occur in different areas of the spine and often has cosmetic and physiological changes. Scoliosis can develop during childhood or adolescence, but it can also affect adults. 1 in 15 Australian girls develop scoliosis between ages 9-14. It can be mild, painless and not progressive or severely painful and tends to worsen with age.

### Types of Scoliosis:

1. **Idiopathic Scoliosis:** The most common type, where the cause is unknown. It often appears during adolescence.
2. **Congenital Scoliosis:** Present at birth, due to abnormal spine development.
3. **Neuromuscular Scoliosis:** Caused by conditions like cerebral palsy, muscular dystrophy, or spina bifida.
4. **Degenerative Scoliosis:** Develops in adults due to wear and tear on the spine.

### Signs and Symptoms of Scoliosis:

- Uneven shoulders or hips
- One side of the ribcage or shoulder blade sticking out more than the other
- Trunk shift to one side while standing or walking
- Deeper waist on one side
- Back pain (in adults)
- Difficulty breathing (in severe cases)
- Leg pain or numbness (in severe cases)

### What Causes Scoliosis?

While the exact cause of idiopathic scoliosis is unknown, factors such as genetics, degenerative arthritis, and environmental factors may play a role. Congenital and neuromuscular scoliosis have specific causes related to spine development or nerve-muscle control. In adults, factors like spinal stenosis, aging changes, or injuries may contribute to Scoliosis development. **The key is early diagnosis and intervention to prevent the spinal curve from getting worse.**

### How is Scoliosis Diagnosed?

Scoliosis is typically diagnosed through:

- **Physical Exam:** A doctor will observe your posture and look for signs like uneven shoulders or hips.
- **MRI or CT Scan:** These give a clear view of the spine's curvature. Regular screenings are crucial to monitor the curve development. A Cobb angle of the spine is measured after imaging is done to know the degree of curvature.

### Treatment Options:

Treatment for scoliosis depends on the severity of the curvature, the age of the patient, and whether the curve is progressive. Common treatments include:

1. **Observation:** For mild scoliosis (curvature of less than 25 degrees), the doctor may just monitor the condition over time with regular imaging to make sure your curve isn't worsening. A Physical therapist will help with pain management.
2. **Bracing:** If the curve is moderate (20-40 degrees) and the patient is still growing, a brace may be recommended to prevent the curve from worsening.
3. **Physical Therapy:** Specific exercises (such as the Schroth Method and Scolibalance) can help improve posture, strength, and flexibility, and reduce pain.
4. **Surgery:** For severe curves (greater than 45-50 degrees), or if the curve is causing significant pain or health issues, spinal fusion surgery may be necessary to straighten the spine.

### Living with Scoliosis:

- **Posture Awareness:** Good posture can help manage scoliosis symptoms and prevent worsening of the curve.
- **Education of condition:** Knowing your specific Do's and Don'ts when living with Scoliosis. E.g. Don't carry a heavy handbag
- **Exercise:** Regular exercise including strength training and flexibility exercises, can help keep the spine supple and supported.
- **Mental wellbeing:** Making sure you have stress management tools to help with anxiety and body image concerns. Having a support system and community you can lean on.
- **Pain Management:**
  - Over-the-counter pain relievers
  - Heat/cold therapy
  - Physical therapy eg. Myotherapy for dry needling, massage
  - Specialist Physio's and Exercise physiologist to teach you Scoliosis safe exercises eg. Schroth Method, Scolibalance

### Can Scoliosis Be Prevented? Can it be cured?

Scoliosis cannot always be prevented, especially if it's congenital or idiopathic. However, maintaining a healthy lifestyle, good posture, and staying active can help reduce the risk of adult conditions causing scoliosis and your curve worsening with age. If your Scoliosis is structural, it can not be self corrected, if it is a mild curve and detected early, you can potentially deduce the curve with the right therapies.

### Takeaways:

- Scoliosis is a manageable condition that allows you to live a relatively normal life. While it cannot be completely cured, bracing may help reduce the curvature, and surgery can be an option to straighten the spine if necessary.
- Treatment options range from observation to strengthening and the Schroth method techniques to surgery, depending on the severity.
- **Early detection and regular monitoring can help minimise pain and progression.**