SPINECOR
MOVEMENT IS LIFE

The SpineCor

Dynamic Corrective Brace

The FIRST and ONLY
Dynamic Corrective Brace for Idiopathic Scoliosis

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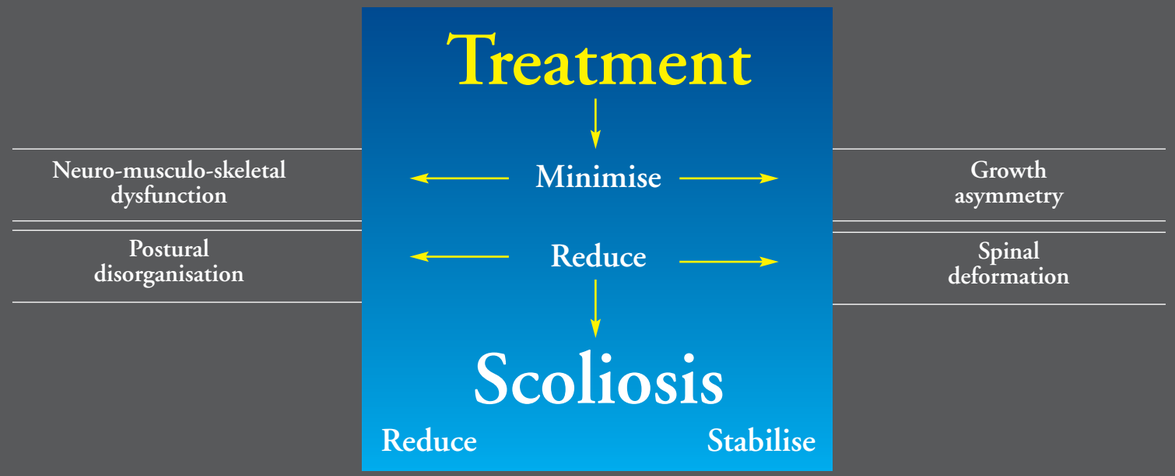
SpineCor System

The SpineCor® System is based on a new etiopathogenic concept[1]. This concept developed by a team of 65 researchers clearly identifies the origins of idiopathic scoliosis and the drivers for progression.



The SpineCor treatment approach targets the **four** key progression factors of idiopathic scoliosis:

1. **Neuromuscular dysfunction**
2. **Growth Asymmetry**
3. **Postural disorganisation**
4. **Spinal deformation**

Whilst it is rarely possible to completely reverse a child's scoliosis, using the SpineCor® Global approach to treatment, addressing all 4 of the key progression factors, it is possible to minimise or reduce these factors to reduce or stabilise the Scoliosis in 89% of cases.

the therapeutic approach

The SpineCor® Therapeutic approach uses curve specific corrective movement strategies to dynamically open curves.

38°

Curve Type:
RT Thoracic Type I

Corrective Movement:
RT Thoracic Type I

22°

Curve Reduction:
Resulting from corrective movement alone.
NO BRACE!

The SpineCor® curve classifications and corrective movements are the result of many years of research.

- Corrective movements must be well understood by clinicians applying the brace.
- Substantial curve reduction can only be achieved by progressively overcorrecting the postural deformity.
- In brace curve reductions with the SpineCor® Dynamic Corrective Brace are NOT comparable to those in rigid braces. SpineCor® will generally show LESS reduction in treatment but GREATER stabile permanent reduction post treatment compared to rigid bracing.
- Scoliosis correction achieved by SpineCor® treatment has been shown to be at least stabile in 93% of cases 5 years post treatment. 27% of patients actually continued to reduce their Cobb angles post treatment.
- Largely Cobb angles achieved in brace with SpineCor® during treatment are sustained post treatment. Less than 5% of patients have demonstrated progression post treatment following the SpineCor® treatment protocol.

Treatment Indications

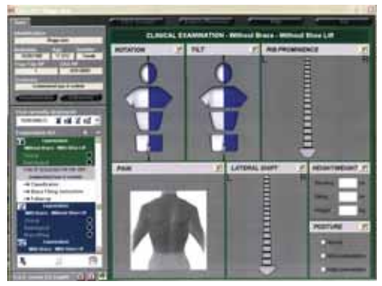
- Idiopathic curves Cobb angles 20°-50°.
- Risser 0-3 or Pre-Menarché.

Obtaining Optimal Results

- SpineCor® has shown to be beneficial in reducing and stabilising large curves in children with advanced skeletal maturity, however, optimal results will **ALWAYS** be achieved by early treatment.
- The percentage of curve improvement, stabilisation and worsening by SRS definitions have been shown in studies to be the same for patients 15°-30° and 31°-50° only the amount of correction changes.
- Given an overall therapeutic success of 89% (improvement/stabilisation of initial Cobb angle) the ultimate treatment outcome and potential to avoid surgery will always be better the earlier treatment is started.
- Of curves 20°-29° with Risser 0 or 1 68% **WILL** progress.[(Lonstein & Carlson)] Early SpineCor® treatment with its high patient acceptability and no side effects should be considered for such curves.

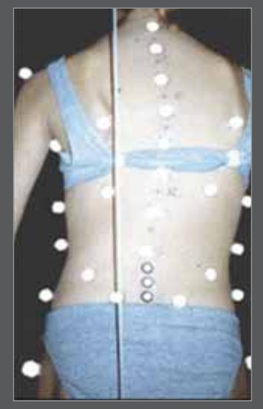
Diagnosis
and practical application

- The SpineCor® Assistant Software (SAS V3.6) guides clinicians through the process of curve classification, brace fitting and follow-up. The SAS Software may be used by both prescribers and treatment providers and is easily installed on most computers.
- Brace fitting now requires no special tools, equipment or environment.
- Once familiar with the system brace fitting and setup time takes less than 1 hour.
- Brace follow-up adjustments are advised each 3 months. The process of reviewing the brace fitting and making any necessary adjustments takes less than 30 minutes.
- Overall clinical time for the brace provider is potentially less with SpineCor® than with rigid bracing systems.
- Overall time for prescribers overseeing the treatment should be no different to that required for patients under rigid brace treatment.
- X-ray reviews are advised each six months to safely monitor treatment in the brace (after initial diagnostic and fitting confirmation x-rays).



Patient Case Study

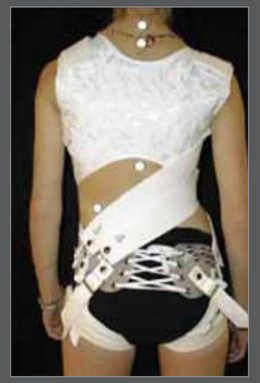
The following case study follows the treatment of an adolescent female patient with idiopathic scoliosis whose initial presentation at 9 ½ years and Risser 0 was with a 36° right thoracic curve.



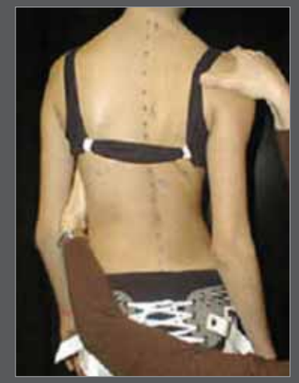
Patient C - 9 1/2 years old - 36°
Clinical aspect before treatment

Patient C - 9 1/2 years old - 36°
Radiological aspect before treatment

After evaluation of the patient's radiological, clinical and postural data she was classified as a Right Thoracic Type 1 according to the SpineCor classification.



Patient C - Wearing SpineCor
Brace Set-up for
Right Thoracic Type 1



Patient C - Corrective Movement
Right Thoracic Type 1

Each SpineCor® classification has a specific corrective movement strategy for progressive curve reduction.

In the case of Right Thoracic Type I, the corrective movement is counter clockwise rotation of the thorax and clockwise rotation of the shoulder girdle.

Patient C - Day of Brace Fitting - 24º

Patient C - 6 Months in Brace 4º

corrective movement

Patient C – After 15 months of Brace Treatment 2° - without brace in place.

Patient C - Clinical Aspect Before Treatment

Patient C - Clinical Aspect After Treatment

Patient C's postural correction and Cobb angle reduction have been maintained three years post bracing.

Patient advantages

Movement - treatment allows and encourages normal activities, sports, dance, riding etc.
Cosmesis - easily worn underneath the patient's regular clothing for optimal cosmesis.
Comfort - cool to wear with minimal irritation. 4 hours break from treatment daily.
Success - 89% effective; clinically proven in a 400 patient 10 year study.
- A treatment with no side effects.

Expenditure - a cost effective treatment option.

Cool to wear with minimal irritation

Easily worn under clothing

Treatment Duration & Weaning

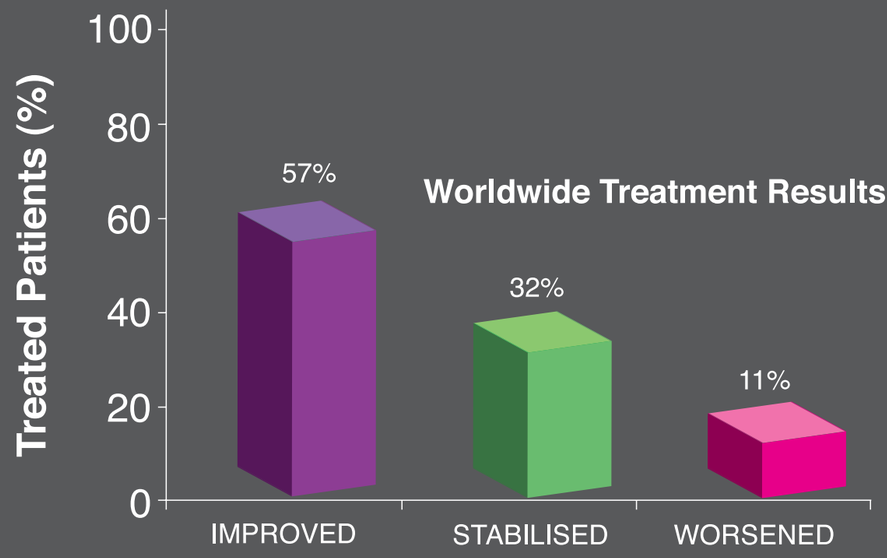
- Average treatment duration for adolescent idiopathic scoliosis is 26 months.
- Bracing is not weaned before the following criteria are satisfied.
  i) Risser 4+
  ii) 24 months post-menarché
  iii) Minimum brace wearing duration of 18 months
  iv) With Brace and Without Brace x-rays show the same or very similar Cobb angles (5° or less difference)
- Providing the above criteria are met the patient should have developed a neuromuscular integration of the corrective movement strategy to maintain a stabile curve. Long term 5 year post treatment studies show 93% of cases do not increase their cobb angles from the point of weaning.

Worldwide Treatment Results

SpineCor® is now used in 17 countries and 82 treatment centers around the world.

Since its first clinical use in 1993 over 10,000 patients have been successfully treated using the SpineCor® System.

Data collected from 52 of the centers around the world show results consistent with those published by the developing research center at Ste Justine Hospital and the University of Montreal, Canada.



Patients included in the study range from 20°-50° Cobb angle and Risser 0-3 or post-menarché.