Treating Adult Scoliosis and Back Pain with the SpineCor Pain Relief Back Brace

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Adult Scoliosis

Can be pre existing
  • Adolescent Scoliosis in the Adult (ASA)
Or a new onset of Scoliosis in adulthood
  • Degenerative De-Novo Scoliosis (DDS)
  • The primary concern in most adult cases is Pain
  • Progression and Aesthetics are also considerations
Prevalence of Adult Scoliosis in Back pain

The Perennou study found that out of 671 LBP sufferers:

- 7.5% had evidence of scoliosis on x-ray.
- The prevalence of scoliosis increased with age;
  - 2% before 45 years (most likely ASA)
  - up to 15% after 60 years (new DDS & ASA progression)

Robin et al reviewed 554 LBP patients aged 50 to 84 and found:

- 30% had a spinal curvature greater than 10 degrees
- At 5 year follow up an additional 10% had this magnitude of scoliosis

These studies suggest that

- a significant number of older people have an adult scoliosis and
- its prevalence and progression is directly related to advancing age
Treatment options

- Pain Medication
- Local pain interventions e.g. NR injections.
- PT
- Surgery
SpineCor Adult Treatment Concept

The SpineCor Pain Relief
Back Brace
- Pain
- Posture
- Progression?
- Adult spinal deformities
Corrective Movement & Spinal Loading

LEFT LUMBAR

CLASSIFICATION

CORRECTIVE MOVEMENT

BRACE IN PLACE
SpineCor Adult Research Results

Study Purpose:
To analyse the results of SpineCor brace in the treatment of back pain related to adult scoliosis, in a multinational, multicentre setting.
SpineCor Adult Research Results

- **Methods:**
  Six centres from Canada, USA, England, and Northern Ireland volunteered to have a researcher analyse the clinical records.
SpineCor Adult Research Results

The inclusion criteria were:

- Pre-existing adolescent scoliosis in adulthood (ASA) or a Degenerative de-novo scoliosis (DDS)
- Spinal Pain related to the presence of scoliosis
- Treatment period between 2005-2007
- Minimum compliance of 3 months in brace
- Minimum follow-up x-ray of 3 mths
- Minimum Pain score follow-up of 12 mths
SpineCor Adult Research Results

- Of the 48 adult patients treated in the selected centres, 26 cases met the inclusion criteria.
SpineCor Adult Research Results

Results:

- 24 of the 26 patients (90%) achieved some measure of pain relief.
- 1 aggravation
- 1 no change
- The average pain was VAS avg. 6/10
- The average pain improvement was 4.3 points on VAS (70%).
- Measured min 12 mth follow up
SpineCor Adult Research Results

Results:

- There was an average Cobb angle reduction of 4.41° with a range of -12° to +3°.
- There was no statistical significant correlation between Cobb angle reduction and pain intensity decrease.
SpineCor Adult Treatment Concept

Conclusion:

- In certain cases SpineCor may improve back pain associated with scoliosis
- This cohort included a range of different age groups, sexes and aetiologies of adult scoliosis i.e. ASA & DDS.
- Larger prospective studies are needed to examine the treatment against a control group and stratify results according to subgroups.
Patient A

- 26 year old female,
- Painful adolescent idiopathic scoliosis as an adult (ASA1).
- Pain 7/10.
- 32 deg right thoracic scoliosis.
- 8 to 12 hours for 3 months
- Gradual relief of pain to 2/10.
- Improvement of 8 degrees to 24 deg.
- Relief of 1-2/10 and spinal correction have been maintained for over 2 years.

Courtesy of Dr Tom Pappas
Patient B

- 47 year old female
- Degenerative De-Novo Adult Scoliosis. (DDS)
- Pain 7/10.
- A 40 deg degenerative lumbar scoliosis.
- Immediate relief of pain to 3/10.
- Pain relief of 0-3/10 maintained for over 2 years
- Note the improved left lateral shift showing “spinal off loading”.

Courtesy of Dr Tom Pappas
Thank You.