

The experiences and effectiveness of the Spinecor brace on older adults with degenerative scoliosis: a mixed methods pilot study

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Introduction: This paper details the qualitative experiences together with the quantitative effects of a mixed methods study into the SpineCor brace on older adults with degenerative scoliosis.

Objectives: The primary objective of this mixed methods study was to explore the qualitative experiences of wearing a Soft SpineCor brace in Older Adults (over 50 years old) with Degenerative Scoliosis. The secondary objective was to conduct a pilot study evaluating the quantitative effectiveness of the brace using different pain and quality of life questionnaires.

Methods: Participants: For the participants to be eligible for this part of the overall study, they were required to have worn the brace for 6-months (Figure 1). This time point was selected as it was believed by clinicians that it would be where the most noticeable changes in the patients' health and pain scores would be observed. Furthermore, 6 months gave enough time for any initial teething problems with wearing the brace to be identified and resolved, as well as allowing the patients to reflect on their experiences of wearing the brace over a reasonable period of time. Due to significant problems with recruiting patients, only eight participants; 1 male and 7 female aged 55 and over participated in this study. Instrumentation: The spinecor brace used on the older adults was similar to the one used in young patients with adolescent idiopathic scoliosis reported in the literature. Procedure: All the participants were interviewed and completed the questionnaires. The data gathered from the interviews was then analysed using a top down approach with themes and subthemes being extracted.

Results and Discussion: The results showed that the main experiences of living with scoliosis in people over 50 was one of constant pain and limited activity levels. The interviews also identified the benefits patients experienced whilst wearing the brace along with the previously unknown functional problems associated with wearing the brace such as the comfort and practicalities of the brace design. As a result of the findings of this study, the SpineCor company changed the design of their brace to try to resolve the functional problems that the participants in this study experienced. The results from the quantitative questionnaires were compared with those from the control group who did not receive the SpineCor brace. Overall, we found that the patients who wore the brace, when interviewed, reported improvements in their pain and quality of life.

Conclusions and significance: The main experiences of living with scoliosis in people over 50 was one of constant pain and limited activity levels. The results suggest that the Spinecor brace is effective in reducing pain and improving the quality of life in older people with degenerative scoliosis. These preliminary results suggest that providing a soft brace to older people with degenerative scoliosis may help to decrease pain and improve quality of life.

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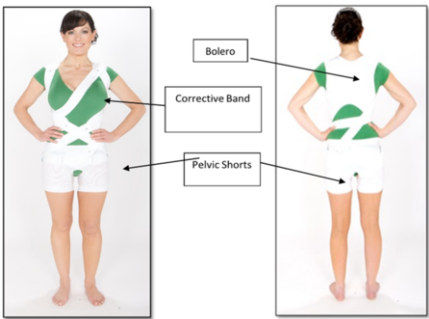


Figure 1. AP view of a Soft SpineCor brace.