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Long-Term Patient Satisfaction Survey Of Adolescent Idiopathic Scoliosis Patients Fit With The Boston Brace System Scoliosis Orthosis



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The Boston Brace has been a staple of idiopathic scoliosis treatment since its introduction in the 1970's. However, significant data in reference to long term health-related quality of life, body image, and perspective on patients' past orthotic treatment for idiopathic scoliosis is currently lacking.

Methods

Introduction

The main objective of this study was to evaluate long-term outcomes after Boston Brace treatment for scoliosis from the patient's perspective, with the aim of obtaining information to help inform future treatment plans. Data collected from patients at least five years post-bracing via online multiple choice and open response survey.



- **15.9%** of adherent patients has spinal surgery. (significant at p<0.01)

Results

78.9% of Boston Brace patients did not undergo scoliosis surgery.

86.8% of adherent wearers that had PT did not undergo scoliosis surgery

32.1% who reported non-adherence to brace wear had spinal surgery.

44% of non-adherent wearers that did not have PT underwent surgery for scoliosis.

17% of non-adherent wearers that had PT had spinal surgery.

Receiving PT at the time of orthotic treatment was significantly associated with not undergoing spinal surgery (p<0.01)

32.1% of patients reported non-adherence with brace wear, the top factors being:

- "The brace was uncomfortable" **85.2%**.
- "Interfered with recreational activities (sports, dance, theater)" **58.3%**
- "The brace was too hot" 51.9%.

64.9% reported having scoliosis affected their body image.

Conclusion

Note

findings.

Chart 2. Bracewear Adherence and Rates of Surgery



Perspectives from past Boston Brace wearers can help inform our future approach to treatment, including providing additional support for the multidisciplinary team approach to scoliosis management and showing areas of improvement for brace design. The study results also underline the importance of acknowledging the long term psychological ramifications of idiopathic scoliosis.

• Because of the self-report nature of the study, we are limited in our ability to draw objective conclusions, especially regarding causation. Additional high-level research will be beneficial to delve deeper into these

