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ASSESSMENT OF STRESS OF ADOLESCENT IDIOPATHIC SCOLIOSIS PATIENTS WHILE WEARING BRACE

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Background: The adolescent years are among the most stressful times in a person's life and if they have adolescent idiopathic scoliosis (AIS), stress response can be roused by spinal deformity and increased by brace treatment. The purpose of this study is to assess stress of patients with AIS who wear a spinal brace with "Bad Sobernheim Stress Questionnaire (BSSQ)".

Material and Method: Clients fulfilling that criteria were included this study 8-17 years of age, diagnosed with AIS, at least two months experience with the orthosis wear. The BSSQ consists of 8 Likert-scale items. A maximum score of 24 indicates the lowest level of stress

Results: 38 clients (mean age: $13,96 \pm 3,48$, min:8,max:17) who had come Formed Physical Therapy and Rehabilitation Clinic between March 2008 and November 2010 included in this study and fulfilled the questionnaire. They were using Cheneau brace for $11,65 \pm 11,37$ months (min:2, max:30) 7 were male and 31 were female. Mean Cobb angle was $34,45^\circ \pm 10,89$ (min:18 max:57) and mean rotation angle was $6,13^\circ \pm 4,19$ (min:0, max:22). The average stress value was $11,57 \pm 5,25$ (min: 22, max:3). There were a negative correlation between brace using time and stress ($r = -0,870$, $p = 0,03$); and there were no correlation between age and stress ($r = 0,208$, $p = 0,64$).

Conclusion: Previous studies suggested that BSS questionnaire is reliable for deformity related stress. We used the BSSQ and our study showed that braces in AIS treatment seem to produce stress

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IMPORTANCE OF TEAM TO INCREASE COMPLIANCE IN ADOLESCENT SPINAL DEFORMITIES BRACE TREATMENT: A CROSS-SECTIONAL STUDY OF TWO DIFFERENT SETTINGS

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Background

SOSORT Brace Treatment Management Guidelines highlight team's role.

Purpose

To verify the importance of rehabilitation team in adolescent patients bracing

Materials and Methods

Population: 38 patients (28% hyperkyphosis, 72% AIS) extracted from one single CPO database; same MD; brace wearing for at least 6 months between 01/01/2008 and 01/09/2009; age 10 or more.

Methods: Two questionnaires: the SRS-22, and one especially developed (QT) with 25 multiple choice questions about adherence to treatment (sections: brace, exercises, team).

Groups: the differences between the two PT teams were team building (G1 highly structured and collaborative) and setting (G1 private, G2 health national service). G1 included 13 patients and G2 25.

Results

No population differences at baseline.

Response rates: 92% QT and 69% SRS-22 (G1), 60% and 56% (G2) respectively.

There was more compliance in G1 than in G2: in particular, brace wearing (75% vs 55%), exercises adherence (58,4% vs 36,3%), and social activities (92% vs 66%). In G1 there was less sport activities give up (0% vs 36,3%) and pain (7% vs 41%) than in G2.

All domains of SRS-22 were strikingly different: function (4.13 G1 vs 2.90 G2), pain (3.93 vs 2.87), body image (3.84 vs 2.59), mental health (4.13 vs 2.91), satisfaction with treatment (4.17 vs 3.85).

G1 had better radiographic results (6.7° improvement vs 4.2°).

Conclusions

With the same MD and CPO (i.e. same brace and treatment type and quality), PT team building and setting plays a major role in compliance and final results.