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Psychological changes during one-month course of Barcelona Scoliosis Rehabilitation School (BSRS)

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From 7th International Conference on Conservative Management of Spinal Deformities
Montreal, Canada. 20-22 May 2010

Introduction (research question)

During adolescence scoliosis has been considered a risk factor for psychological disturbs regardless of treatment status: a stress response can be roused by spinal deformity and increased by brace treatment. A disturbance in Body Image is an almost universal finding in adolescents with scoliosis, mainly in female adolescents wearing a brace. However, Dekel et al. demonstrated that physiotherapy could improve the adolescent Body Image. The present study focuses on the psychological aspects of young people with scoliosis during a physiotherapy treatment.

Materials and methods

The sample consisted of 35 persons with scoliosis, aged between 11 and 26. They were 32 girls and 3 boys; 12 of them did not wear a brace, while the others did (14 wore it part-time and 9 full-time); only 12 had attended physiotherapy sessions in the past. The setting was a private centre where the sample took an intensive summer course of physiotherapy of 4 weeks (5 days per week; e hours per day). They worked as a group. During the rehabilitation course, the patients learnt curve pattern specific exercises and received education and support to understand what scoliosis is and how to cope with the condition and the treatment.

To assess any psychological changes as a consequence of the treatment, "Drawing a Person" (DAP) test (Machover, 1948) was given at the beginning and at the end of the course. This is a "projective test", used to appreciate the emotional aspects of a person, such as anxieties, mood, social relationship, self-esteem. This methodology

has been used in other researches successfully (Perez Testor, 2000).

We used non-parametric tests (McNemar test) to measure nominal variables for the statistical analysis.

Results

We found statistical differences between the pre-test and post-test in relation to anxiety, self-esteem and sexual identities ($p < 0.05$).

Discussion

The results confirm the literature findings about the existence of a greater detriment of the Body Image in adolescents with scoliosis. Psychological changes after physiotherapy could be interpreted considering different variables, such as the social (the importance of the group and the relationship with the doctor and the physiotherapists) and the personal ones (the body changes, the feeling of competence after learning more about their own scoliosis and body)

Conclusion

This is a study about the psychological effects assessed in the intensive summer BSRS. Further researches will aim at increasing the sample size, adding one or more quantitative tests, in order to enrich the results, and at introducing a Control Group.

Published: 10 September 2010

doi:10.1186/1748-7161-5-S1-O29

Cite this article as: D'Agata et al.: Psychological changes during one-month course of Barcelona Scoliosis Rehabilitation School (BSRS). *Scoliosis* 2010 **5**(Suppl 1):O29.

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