

## LETTERS TO THE EDITOR

RE: Adolescent Idiopathic Scoliosis: Modern Management Guidelines, Shindle, M. K., Khanna, A. J., Bhatnagar, R., Sponseller, P. D., JSOA 15(1): 43–52, 2006

Dear Editor:

I would like to thank you very much for the wonderful review by Shindle et al. (1), "Adolescent idiopathic scoliosis: modern management guidelines," published in the Spring 2006 issue of your journal. But, for the same reason we appreciated it, we also need to point out a couple of weaknesses in the treatment section of the article that must be carefully considered. Even if, from an historical point of view, in the last 20 years exercise as a treatment option for this condition has received scarce attention and its value today is still regarded with criticism, it's no longer possible to ignore the potential therapeutic role of exercise for adolescent idiopathic scoliosis (AIS). Two systematic reviews (2, 3) have shown the existence of many concordant positive results in controlled trials, and this has driven the choice of the only existing evidence-based guidelines (4) to give an evidence strength of C to exercise as a therapeutic option for AIS. Incidentally, this evidence strength is the same as that given to bracing, which means not the same efficacy as therapy, but the same strength for scientific proofs in terms of possible biases, that is, concordant results in many controlled trials (CCTs). Because there are only CCTs, as stated by Shindle et al. (1), some controversy still exists on bracing, but this therapeutic option is not as ignored as exercise, presumably because of past orthopaedic tradition.

The second point is that the world of bracing is not limited to the United States. Tools such as the Chêneau, the Lyon, and other braces (5) should be at least mentioned in an international journal with a worldwide readership.

Conservative treatment of AIS is today under question by many (1), but we all know that we cannot avoid searching for the best therapeutic approaches, possibly with no knives, rods, hooks, or screws. For this reason, a new International Society on Scoliosis Orthopaedic and Rehabilitation Treatment (SOSORT) was founded (5–8), as well as a new scientific journal, *Scoliosis* (www.scoliosisjournal.com) (7). We hope that in the future the evidence in this currently neglected field [more than 50% continued reduction of papers from the inception of Medline to 2005 (9)] will increase, in whichever

direction, so as to offer the best appropriate treatment to our future: our own children.

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## References

- Shindle, M. K., Khanna, A. J., Bhatnagar, R., Sponseller, P. D. Adolescent idiopathic scoliosis: modern management guidelines. J. Surg. Orthop. Adv. 15(1):43-52, 2006.
- Negrini, S., Antonini, G., Carabalona, R., Minozzi, S. Physical exercises as a treatment for adolescent idiopathic scoliosis. A systematic review. Pediatr. Rehabil. 6(3-4):227-235, 2003.
- Lenssinck, M. L., Frijlink, A. C., Berger, M. Y., Bierman-Zeinstra, S. M., Verkerk, K., Verhagen, A. P. Effect of bracing and other conservative interventions in the treatment of idiopathic scoliosis in adolescents: a systematic review of clinical trials. Phys. Ther. 85(12):1329-1339, 2005.
- Negrini, S., Aulisa, L., Ferraro, C., et al. Italian guidelines on rehabilitation treatment of adolescents with scoliosis or other spinal deformities. Eura. Medicophys. 41(2):183–201, 2005.
- 5. Brace action: where to push and why. SOSORT 2005 Consensus Paper Topic 2 (http://www.isico.it).
- Physical exercises in the treatment of idiopathic scoliosis. SOSORT 2005 Consensus Paper — Topic 1 (http://www.isico.it).
- Weiss, H. R. Scoliosis: a journal dedicated to multidisciplinary research on prevention, control, and treatment of scoliosis and other spinal deformities. Scoliosis 1(1):1, 2006.
- 8. Why we treat adolescent idiopathic scoliosis? What we want to obtain and to avoid for our patients. SOSORT 2005 Consensus Paper Topic 3 (http://www.isico.it).
- Negrini, S., Carabalona, R. Social acceptability of treatments for adolescent idiopathic scoliosis: a cross-sectional study. Scoliosis 1:14, 2006.

## In Reply

Dear Editor:

The authors appreciate the additional information and perspective provided by Drs. Negrini and Rigo, who are respected researchers in many topics related to the pediatric spine. Our patients are constantly searching for alternatives to bracing and surgery, and to the difficulties they pose. The support for valid alternatives is strong. The Society and the Journal may assist in bringing forward valid studies and new ideas. We look forward to scientifically sound evidence on these topics.

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(Note: Dr. Bhatnagar,
who was a medical student at the time of this study,
was unable to be contacted.)