Reviewer's report

Title: Conservative treatment of idiopathic scoliosis according to FITS concept: presentation of the method and preliminary radiological and clinical results respecting SOSORT and SRS criteria.

Version: 2 Date: 23 August 2011

Reviewer: Martha Hawes

Reviewer's report:

I have provided alternate suggestions below. Suggested changes are in large capitals. My comments are in italics.

Paragraph indent formatting needs to be checked throughout--errors probably introduced by MS Word...

p. 1. paragraph 1.
However, idiopathic scoliosis BY DEFINITION is a disorder of unknown origin, therefore treatment is IN RESPONSE TO SYMPTOMS.

p. 1. paragraph 2. last sentence--is there a word missing? 'including defects attitude'

p. 2. para 1. ...and corrective bracing, and SEVERE scoliosis (COBB ANGLE GREATER THAN 50) who underwent...

p. 2. para 2. ...this method could be PREDICTED FOR other ....

p. 2. para. 2. In the literature the PERCENTAGE of braced...

p. 2. para. 3. ...lower limb ASYMMETRIES... ...published literature comprise A methodological...

p. 2. para. 5. ...for diagnosis and therapy OF structural and NONSTRUCTURAL...

p. 2. last line. 'To make THE child aware...'

p. 4. ATR needs to be spelled out in its first use. (maybe I've missed it...)

p. 4. last paragraph. ...the X-ray with THE child...

p. 6. para. 1. ...is deformation of THE physiological shape of THE spine...

p. 6. para. 2. .Correction in THE frontal plane...

p. 6. para. 3. ..the apex of THE curve and...

p. 6. para. 3. --sitting and standing. THIS WILL FACILITATE the corrective shift.
p. 7. para. 1. Derotation of THE scoliotic.... muscles work in different directions (delete 'a')...

SO PRECISION IS IMPORTANT in myofascial release IN ORDER to obtain.... THIS IS FOLLOWED BY release OF short spinal rotators.

Derotational movement of THE trunk is...

The secondary curve of scoliosis should ALWAYS BE stabilized.

p. 7. para. 2. It is responsible for THE profile of the spine in THE sagittal plane but also HAS an impact on derotation....with THE anterior ligament which changes its placement DEPENDING ON COBB ANGLE MAGITUDE.... THE patient's POSTURE....

p. 7. para. 3. ...lower truck WHICH RESULTS IN...

p. 7. para. 4. ...myofascial restrictions WHICH MAKE corrective movement difficult, (REMOVE PARAGRAPH)... improving flexibility and moBility of scoliosis, (ADD COMMA)... P. 8. para. 1. TO BUILD AND STABILIZE... (ADD PERIOD AT END OF SENTENCE).

p. 8. para. 3. Check the verbiage of this paragraph--doesn't make sense in a couple of places. (...we can state enlarged lordosis..??). lower part of truck is essential (is the basis)??

p. 9. para. 1. ...children have PARTICULAR DIFFICULTY DOING LATERAL SHIFT CORRECTION IN THE FRONTAL PLANE, MAINLY DUE TO INCREASEEED TENSION OF THE MYOFASCIAL TRACT.....

...be aware that the shift of THE primary curve...

p. 9. para. 2. Facilitation to correct three-plane???? corrective breathing.... not sure what is meant here.

p. 9. para. 3. ...is done in open and CLOSED kinematic...

p. 10. Para. 2. These patterns are to be HELD until the moment when on THE right side.

...the minor functional compensation WILL APPEAR.

'it means costal hump...' this sentence needs to be clarified, meaning not clear. Also, cite reference 45 instead of 'bunnell'.

p. 10, last paragraph. ...elongation movement of THE upper trunk....

p. 11. para. 1. ...and MODIFIED in the apprpriate time according to clinical CHANGES
p. 11. para. 2. ...the most desirable OUTCOME is correction..

p. 11. para. 2. ..and MORE AMENABLE.. to correction.

...THE MOST DESIRABLE WHEN, WHERE, AND IF TO DECREASE or add the compensation...

p. 11. para. 3. Delete first sentence (redundant).

p. 11. para. 3, sentence 2: FITS is a complex, asymmetrical and individual therapy THAT can be used AT ANY AGE AND COBB ANGLE. It requires THE child...guided by AN EXPERIENCED therapist. FITS therapy is conducted in AN in-patient clinic and ON AN out-patient BASIS...

....to work in AN INTERDISCIPLINARY GROUP OF SPECIALISTS INCLUDING...

p. 11. last paragraph. ..this study suggest AN individually adjusted...

...preparing FOR SURGICAL INTERVENTION...

p. 12. para. 2. ...criteria were RETROSPECTIVELY analyzed...

p. 14. para. 2. use 'percentage' in this context rather than 'percent'

p. 15. para. 1. The MEAN OBSERVATION PERIOD WAS 2.08 YEARS (RANGE 1-5 YEARS). TWENTY-SIX patients...

p. 19. last para. only one in eight HAS PROGRESSED TO >48 DEGREES, but because SKELETAL MATURITY WAS REACHED, SURGERY WAS NOT REQUIRED.

...so are at risk OF SURGICAL INTERVENTION.

p. 23. discussion, first sentence. SCOLIOSIS IS A SYMPTOM THAT DEVELOPS IN RESPONSE TO NUMEROUS CAUSES INCLUDING INJURY, INFECTION AND GENETIC DISORDERS (CITE MOE'S TEXTBOOK AND/OR REFS BELOW).


p. 23, para. 1. second sentence. IN MOST CASES, TREATMENT ADDRESSES SYMPTOMS of scoliosis.... rather than its cause.
...proper loading OF THE LOWER LIMBS AND PELVIS BY PROPER BALANCE...

...method meets these REQUIREMENTS...

...the patient can perform the correction patterns and THEN STABILIZE.

p. 24. para. 1. the sentence structure here is rough, leading to confusion.

p. 24. para. 2. ...properties of the brace, MORE SEVERE AND RIGID PRIMARY scoliosis...

p. 24. last paragraph. ...to exercise and work on their HEALTH. In OUR observation CLINICAL IMPROVEMENT occurs long...

p. 25. para. 4. ...First, THE OBSERVATION PERIOD is limited to a mean followup of 2.08 years. Many of the children DID NOT OBTAIN SKELETAL MATURITY... THE FITS method has been IN use since 2005.

p. 25, para. 5. ...to what extent the children or THEIR parents were COMPLIANT in...

p. 25, last para. FITS method WAS CORRELATED with ALTERED NATURAL history. Further study with A LARGER GROUP and longer....

...progression was more COMMON in double scoliosis...

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'