

## Kinesiological, Neuroanatomical, and Clinical Aspects in Kyphosis - for Hyper Adaptive Exercise Therapy Program

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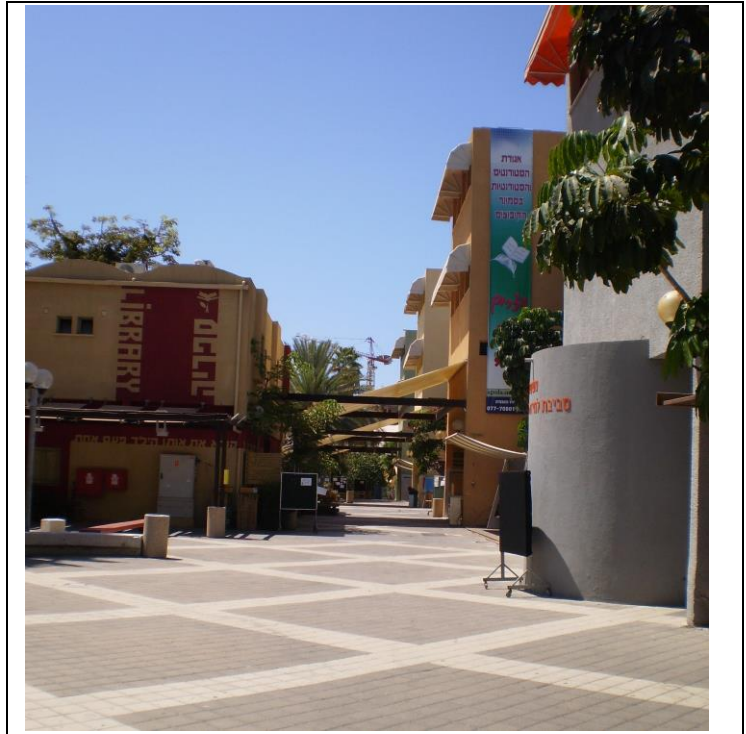


**Abstract :** In the continued search for the etiology of hyperkyphosis, exercise therapists began to recognize the multifactorial nature of the problem and the difficulty in establishing an accurate definition of "posture norms". This presentation focuses on a comprehensive integrative approach to treating hyperkyphosis. Its purpose is to expand and enrich the use of adapted exercises both therapeutically and in regular activity for improving postural patterns in daily functioning. Spinal mobility and control is affected by the regular movement and functioning of dozens of small joints between the vertebrae. A local constraint directly affects range of movement in that particular area, and indirectly affects other areas above and below it due to various chain reactions.

**The presentation will include important practical tools related to:**

1. Anatomical background - structure of upper and lower back segments
2. motor control and thoracic spine sensorial representation in the brain
3. Thoracic spinal mobility exercises in Therapy
4. Designing integrative vs. isolated mobility exercises
5. Active vs. passive mobility exercises.
6. Anatomical constraints vs. motor learning and control training.
7. Using sensory feedback to improve motor and mobility control
8. Touch and manual techniques in individual guidance.

The presentation will include a clinical case-study video, combined with a didactic power point presentation using original high level interactive animations focusing on the kinesiology of human movement.



**Biography :** Dr. Gill Solberg is a Clinical kinesiologist since 1985. During his graduate studies he specialized in Clinical Kinesiology and Postural Disorders. He is a diagnostician and head therapist in his private clinic that offers Physical Therapy, for Musculoskeletal Dysfunctions and postural disorders and is a leading lecturer at various academic colleges in Israel. His book "Postural disorders and musculoskeletal dysfunction: diagnosis prevention and treatment" was published by "Elsevier" and is now being an academic textbook, all over the world (5 languages) .Dr. Solberg is the Co finder of Muscle&Motion Posture, a groundbreaking new premium software in the field of Human Posture that is the first of its kind in the world ([www.muscleandmotion.com](http://www.muscleandmotion.com)).

### Publications :

1. Postural Disorders and Musculoskeletal Dysfunction 1st Edition
2. The Clinical Relevance of Hyperkyphosis: A Narrative Review
3. Age-Related Hyperkyphosis: Its Causes, Consequences, and Management
4. A comparison of three methods for measuring thoracic kyphosis: implications for clinical studies
5. Overview of hyperkyphosis in older persons

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