Translatoric Spinal Manipulation (TSM™) for Physical Therapists

Krauss JR, Evjenth O, Creighton D. Minneapolis, MN 55447, Lakeview Media LLC, 2006, spiralbound (with DVD), 134 pp, illus, ISBN: 978-1-59975-195-5, $79.95.

This is an excellent workbook for physical therapists interested in developing their manual therapy skills. It is extremely well organized with 6 chapters: "Introduction," "Applying TSM," and 1 chapter for each spinal region—cervical spine, thoracic spine, lumbar spine, and sacroiliac joint. The book is spiralbound so it will lie flat when opened.

In the authors' clinical experiences, they observed that many commonly used manipulation techniques did not relieve pain or improve segmental hypomobility. They concluded that this was because the techniques lacked specificity of forces and involved the use of large angular or rotational forces. The authors developed the techniques of translatoric spinal manipulation (TSM) as a method of spinal manipulation that specifically isolates motion to a single segment.

Translatoric spinal manipulation is defined as a "system of manipulative techniques which emphasize the use of small amplitude and straight line (translatoric) traction or gliding impulses delivered parallel or at right angle to an individual vertebral joint or movement segment." The technique is further isolated by the use of either manual stabilization or spinal pre-positioning to limit movement at adjacent spinal segments.

The authors did not, however, cite any research showing that the lack of effectiveness of mobilization is due to lack of specificity of forces or the large amplitude of rotational forces used. The development of these translatoric techniques is based only on their clinical experience, and research was not cited demonstrating that these techniques work better than other techniques. In chapter 2, "Applying TSM," the authors present 10 theoretical cases involving specific combinations of segmental dysfunctions and interventions (including the techniques, grades, velocities, and spinal segments involved). Each subsequent chapter begins with a review of the bony anatomy, joint articulations, ligamentous anatomy and kinematics, and the biomechanics of the translatory movements.

For each area of the vertebral column, there are clear color diagrams of the articulations, the articular surfaces, and the direction of joint rolling and gliding. Each technique is described thoroughly, both in text and with illustrations to enhance the reader's understanding. Landmarks that must be stabilized are identified with an "x," and articulations and the direction of mobilization are marked with an arrow. In addition, the authors use several color pictures of the technique being performed, with step-by-step instructions.

For each technique, the authors provide a section on troubleshooting and comments on the use and variations of a particular technique. Most important, each technique also is accompanied by a simple coding system to inform the reader of the author's opinion as to whether the technique is appropriate for use by "entry-level" practitioners (students or new graduates) or postprofessional (experienced) practitioners. The authors also code whether the technique is appropriate for low-velocity or high-velocity translatoric manipulations, or both.

The DVD included with the book follows the book page by page, and there is a narration about each of the techniques illustrated in the manual. It is extremely helpful to people who are visual or auditory learners.

This manual is very useful for the physical therapist who wishes to further develop manual therapy skills in translatoric spinal manipulation. The authors state that the techniques are based on their assessment of the need for very specific treatment methods that isolate motion to a single segment. They further state that, after appropriate examination, the skilled use of these techniques has a predictable effect on symptom reduction and restoration of motion. The authors do not provide any references to studies that show evidence of the positive effects of their techniques, however. They state that a number of case studies and case series studies were performed at Oakland University. Although they state that these studies are in various stages of publication, they do not provide any information on expected dates of publication.

Roslyn Sofer

R Sofer, PT, OCS, is Assistant Professor, Physical Therapy Program, Touro College, Bay Shore, NY.

[DOI: 10.2522/ptj.2007.87.6.815]