

# Vestibular S.I.G.

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## Inside this Issue:

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"My candle burns at both ends; It will not last the night;  
Buy ah, my foes, and oh, my friends—It gives a lovely light!"

Edna St. Vincent Millay

## From the Chair: Better Defining Our Practice.....

Have you ever stopped to think about how and why you have set up your practice the way you have? Perhaps it's time for all Vestibular Rehabilitation specialists to stop, think and redefine our scope of practice. The clinical field of vestibular rehabilitation is becoming ambiguous in terms of what and who might become involved in providing comprehensive care of the dizzy patient. With the changing medical arena, due to managed care and legislative policies such as the Medicare therapy cap of \$1,500.00 which went into effect in September, we as vestibular rehabilitation specialists need to better define our scope of practice. State-level third party payers are beginning to use our practice ambiguities as opportunities to shirk financial

liability for many of the critical services provided by vestibular rehab therapists.

Therefore, the act of codifying our scope of practice as rehabilitation professionals is a matter of urgency. This will not only help to improve the focus of our clinical skills but will help to clarify patient and third-party payer expectations about our service. For this reason, the executive officers of the Vestibular Rehabilitation Special Interest Group have mandated a charge to the S.I.G. to move forward with activities which will codify our education, evaluation and treatment practices under the name of physical therapy. Stay tuned during the upcoming 2004 Combined Sections Meeting to learn how we propose to do this on behalf of the vestibular rehab specialist in the upcoming year. See you in Nashville, Tennessee!

**Denise Gobert**

## Vestibular S.I.G. Seeking Nominations

The terms for our current **Vice-Chairperson** and one **Nominating Committee Member** will expire in 2004. Nominations to fill these positions for the 2004-2007 term may be submitted to any Nominating Committee member until the Combined Sections Meeting in February. The responsibilities are listed below.

**Vice Chairperson:** Preparing an annual budget, coordinating funding matters with the Neurology Section chair and coordinating S.I.G. programming.

**Nominating Committee:** Assisting in the determination and submission of a slate of qualified candidates for the S.I.G. executive board.

**Combined Sections  
Meeting  
February 4-8, 2004  
Opryland Hotel and  
Conference Center  
Nashville, TN**

*Handouts will be available on  
line only and will be available  
after 1/12/04 at:  
[Apta.org/Meetings/csm2004](http://Apta.org/Meetings/csm2004)*

### 2004 CSM Highlights

Vestibular SIG members may be especially interested in the following programming:

Tuesday and Wednesday, February 3 and 4, 2004.  
Pre-conference course: Making sense of Cervicogenic Dizziness: Neurologic and Orthopedic Management. Diane Wrisley, PhD, PT, NCS and Paul Vidal, MHSc, PT, OCS

Thursday, February 5, 2004

Just think it: Does mental imagery enhance recovery, function and performance. Judith Deutsch, PhD, PT; Craig Wrisberg, PhD, and Joe Whitney, PhD

Clinical Trials in Physical Therapy: Lessons from the Past, Possibilities for the Future. Moderator: James Gordon, PT, EdD

The W's of Balance and Falls Assessment: Which Instrument to use when and on whom?  
Balance and Falls Special Interest Group,  
Roberta Newton, PhD, PT

Friday, February 6, 2004

Environmental Influences on Motor Function: Theoretical and Practical Considerations. Anne Shumway-Cook, PhD, PT and Alan Jette, PhD, PT

Exercise Induced Neuroplasticity in Parkinson's Disease. Beth Fisher, PhD, PT, Terry Ellis, MS, Pt, Micheal Jakowec, PhD, Timothy Schallert, PhD

Pharmacologic Issues Affecting Outcomes in Patients with Neurologic Disorders. Suzanne Tinsley, PhD, PT

The Vestibular SIG is pleased to be sponsoring two programs at CSM: one combined with a short business meeting and the second a round table discussion.

#### **Vestibular SIG Meeting**

Date: Friday, 2/6/04

Time: 6:30 -8:30 pm

Topic: Vestibular Rehabilitation Practice: Developing a Consensus

Facilitator: Britta Smith, PT, MMSC

We all have decision rules that we use to decide a patient's treatment diagnosis and their course of treatment. Wouldn't it be nice to have a consensus, based on current evidence, of what we do in practice and why?! In place of a formal lecture, once again this year we will provide members with an opportunity to share with one another regarding the physical therapy treatment of common vestibular disorders. The discussions will be structured to try to develop decision trees or consensus of what is current and evidenced based practice with an ultimate goal of generating publishable manuscripts based on the information generated. Please feel free to contact Diane Wrisley at [wrisleyd@ohsu.edu](mailto:wrisleyd@ohsu.edu) if you would like to facilitate a small group or have a suggestion of a topic that should be discussed. A summary of last years discussions on evaluation will be available at the meeting.

#### **Vestibular SIG Round Table**

Date: Saturday, 2/7/04

Time: 3:00-5:00 pm

Topic: Using the Guide to PT Practice for Patients with Vestibular Disorders.

Facilitators: Kristin Parlman, MS, PT, NCS, Massachusetts General Hospital, Boston, MA

The use of the Guide to PT practice is required in many entry level PT programs and in increasing clinical facilities, yet there are questions as to the appropriate patterns and use with patients with vestibular disorders. Join us for a discussion of how to use the Guide to PT practice to facilitate evaluation and treatment of patients with vestibular disorders.

## Research Review:

### Balance Prosthesis for Postural Control: Preventing Falls in the Balance Impaired by Displaying Body-Tilt Information to the Subject via an Array of Tactile Vibrators.

Conrad Wall III and Marc S. Weinberg. *IEEE Engineering in Medicine & Biology Magazine*: pp. 84 – 90. March/April 2003

It is well known that over 40% of the Americans seek medical care for dizziness at least once in their lifetime. This statistic concerns vestibular rehabilitation specialists because this has meant that about 2 million Americans suffer or experience chronic impairment due to dizziness or balance problems resulting in over one billion dollars in annual medical costs. Balance disorders due to vestibular deficits may involve severe reductions in motion cues producing symptoms of dizziness, blurred vision, inability to orient the body correctly and impaired ability to stand or walk safely. In addition, as our society ages demographically, we are increasingly being challenged to find effective rehabilitation strategies to improve functional balance and postural control in a cost effective manner.

The authors of this technical report suggest that rehabilitation specialists use a recently developed 3-D motion sensor array (three accelerometers and three gyroscopes) which uses vibrotactile stimulators to help retrain balance and postural control in vestibular patients and in the frail elderly. This device is the same type of motion prosthesis being currently used by the U.S. Navy to furnish navigational cues that allow blindfolded pilots to control their aircraft.

This portable device consists of inertial sensors worn on the body, a laptop computer and a vibrotactile display called “tactors” (3 x 16 array) that contact the subject’s skin around the waist. The tilt sensor module within the device estimates trunk tilt angle within 2 milliradian (mrad) over a 0 – 10 Hz bandwidth. Accelerometers sense forward – backward tilt while gyroscopes sense medial –lateral movements of the trunk. The system estimates the trunk vertical within 0.1 – 1.0° to the wearer during movements.

The paper describes use of the device with six vestibulopathic patients who were to receive standard vestibular rehabilitation. Evaluation of postural control was performed with and without the “balance aid” using the EquiTest® Sensory Organization Test (SOT). A calculation score called the “Tilt Performance Index (TPI)” was used to compare trials. When compared to the “no-balance-aid” condition, subjects’ sway was significantly reduced from 2.7° to 1.4° for the root-mean squared(RMS) of anterior-posterior body tilt during the more challenging conditions ( $p < 0.05$ ). In fact, the authors claim that the most dramatic finding was that subjects who regularly fell during condition 5 of the SOT without the aid were able to stand without falling when it was turned on. The mediolateral sway was not significantly changed between conditions.

The authors admit that this device is still in the preliminary stage even though it has received FDA approval

however, they present the device as a response to the growing need for a prosthetic aid to patients with postural instability and balance deficits. They recommend that the device be used as a temporary rehabilitation aid during recovery from ablative inner-ear surgery and as a permanent prosthesis for those elderly prone to falls.

Current research with the device is being conducted by Dr’s Conrad Wall III and Marc S. Weinberg at the Jenks Vestibular Diagnostic Laboratory, Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, MA, 02114-3096. Anyone with further questions can contact Dr Wall at Tel: 617.573.4153.

*Reviewed by Denise Gobert, PhD  
University of Kansas*

## Facing Denial? Who ya gonna call??.....

Many new therapists are joining the ranks of vestibular rehabilitation specialists throughout the world. Although we have been in this field a long time, many insurance companies still deny physical therapy services related to vestibular rehabilitation due to limited understanding of what it entails. When faced with a denial by third party payers, many therapists feel frustrated.

To assist therapists, here is what we recommend as an effective, systematic approach:

- 1. Contact Your APTA State Chapter:** Insurance denials are very “state-specific”. Therefore, many state chapters have developed state-specific strategies to assist therapists in approaching the insurance companies. Contact your state chapter representatives to get their views about your situation. This also provides them with information regarding new trends in reimbursement. To obtain contact information for your local chapter go to: [www.apta.org/Components/chapters](http://www.apta.org/Components/chapters)
- 2. Contact the APTA Vestibular Rehabilitation SIG:** The Vestibular Rehabilitation special interest group is a subset of the APTA Neurology section which has additional information about national trends and strategies in third-party reimbursements. If your state organization has not been able to assist you sufficiently, then allow us to check our resources to help in finding a workable resolution. We also have letter templates and information about reimbursement codes relating to vestibular rehabilitation. Go to the SIG website from the Neurology Section homepage at: [www.neuropt.org/homepage.cfm](http://www.neuropt.org/homepage.cfm).

**A Special Thank You:**  
To Tara Denham,  
For nine years of service as  
co-editor of this newsletter.