American Physical Therapy Association / Neurology Section

Vestibular Rehabilitation SIG

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Message from the Chair

Hasn't somebody already done this before?

By Susan L. Whitney,
PhD, PT, NCS, ATC, FAPTA
VR SIG Chair

There is an old saying "why do I have to recreate the wheel" that is often used and expressed with exasperation by many of us when we know that "someone out there" has already complied or produced patient education materials that you need right now for your patient that is sitting in front of you.

As a practicing clinician, I have often said the same thing and wondered how I could get my hands on what I need to help my patient.

The SIG officers felt that this was also a real need that could be met with the resources that we have available to us. The Vestibular SIG officers have made a commitment to developing patient and therapist educational materials over the next year. We hope to post these materials in PDF on the web site for Section members.

The patient resources initiative costs little and has the potential for high impact. The goal of each patient education handout will be that it will be concise and easy to read- at about the 8th grade level. We hope to keep all information sheets to one page. Our goal is to provide a list of materials that you would have access to with a click of the button, once you have arrived at the Vestibular SIG web site.

If you are interested in helping with the project, please contact Sue Whitney at whitiney@pitt.edu. People who volunteer will have one topic or assignment that will be one page in length (at the most two pages). All of the sheets will undergo review by other content experts and then will be posted. Editing will occur to everyone's work but all who participate will be listed on the web site as having contributed to the project.

Our past lists of volunteers often seem to disappear so if you have volunteered in the past and not heard from us, I apologize. We do need your help and expertise with this project. It requires minimal time with maximum potential benefit- improved care for our patients. Michelle Gutierrez has been doing a wonderful job of helping to post information for you on the web site. She has posted URLs of eye movements and also of sites where you can obtain entire articles in PDF that relate to our practice.

The most recent free PDF posting relates to the new Falls Guidelines that are a report of the Quality Standards Subcommittee of the American Academy of Neurology. We hope to keep you up to date with the most recent papers of interest via the web site and also with a listing of biographic references by subject area.

Laura Morris has agreed to take on that initiative of providing the references lists that can be downloaded by topic area. We hope that these projects will meet with your approval. The new projects are targeted to help you provide better care for your patients.

Please contact any of us about your ideas for your Vestibular SIG. We try to be responsive.

The web site (www.neuropt.org) has all of our contact information.

Article Review: Foot and ankle risk factors

Susan L. Whitney
PhD, PT, NCS, ATC, FAPTA
VR SIG Chair

Menz HB, Morris ME, Lord SRI. Foot and ankle risk factors for falls in older people: a prospective study. *Journal of Gerontology: Medical Sciences 2006;61A:866-870.*

Have you ever asked the question: Is there a relationship between foot deformities/problems in your patient's feet and their balance?

The investigators studied 176 older adults whose mean age was 80. Subjects resided in a senior living community. Foot range of motion, strength, foot posture and any foot or toe deformities were noted.

The investigators also recorded additional fall risk factors and followed the subjects for 12 months in order to determine if there was a relationship between the number of falls reported and the risk factors indentified at onset of the study. Forty-one percent of the subjects fell over the 12 month period. Those who fell had less ankle range of motion, more significant hallux valgus, less plantar sensation, and plantarfexionweakness.

The findings, after comparison with all risk factors, suggest that people who fell had more disabling foot pain. They also report that foot pain and decreased plantarflexionstrength were significantly different in those who fell versus those who do not fall, plus they were independently associated after accounting for age and other physiologic risk factors studied.

These data suggest that maintaining foot/toe flexibility is an important consideration when designing a balance program for the older adult.

Physical therapists should consider distal flexibility and strength when working with older adults at risk for falling.

New CPT code for the canalith repositioning

Susan L. Whitney
PhD, PT, NCS, ATC, FAPTA
VR SIG Chair

Effective Jan 2009 we should be billing CPTcode 95992, Canalith repositioning procedure(s) for the canalith repositioning maneuver when performed.

This is a procedural code that should be billed once per day. The CPT Editorial Panel created and the AMA RUC valued a new code (CPT code 95992, Canalith repositioning procedure(s) (eg, Epley maneuver, Semont maneuver), per day) for canalith repositioning, which is described as "therapeutic maneuvering of the patients' body and head designed to use the force of gravity.

By using this type of maneuvering, the calcium crystal debris that is in the semi-circular canal system is redeposited into a neutral part of the end organ where it will not cause vertigo." This is a procedure that has been performed for several years.

Previously this maneuver was billed by physicians as part of an E&M service and by nonphysician practitioners, primarily therapists, under a number of CPT codes, including 97112, therapeutic procedure, one or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities, which has 0.45 work RVUs.

The RUC recommended work RVUs for canalith repositioning is 0.75. Because neurologists and physical therapists are the predominant providers of this service to Medicare patients (each at 22 percent) it has been assigned as a "sometimes therapy" service under the therapy code abstract file. Previously, therapists were billing a wide range of codes for this procedure, including such codes as 97112, 97140 or unlisted codes.

Specific to billing the 95992 CRP procedure for Medicare patients, this is considered a bundled code. Bundled basically means Medicare won't pay for the procedure. They consider it included with other codes, mostly E&M codes and at the current time it will not be paid for separately.

The Medicare program has not assigned a fee to the new 95992 code so it will not be paid modifier or not. The canalith repositioning maneuver should still be billed when performed as it is the most accurate description for the procedure(s) named. It is important to bill even if no payment is expected as this helps build data which can be used to further payment policy.

The above only applies to Medicare. They mention 97112 as being billed for this service but that occurred because there was not a better alternative.

Now that there is a more specific code, 97112 is not the most appropriate code for this service. If you are not doing one of the other components of 97112 and only an Epley, then from a technical perspective you should not bill 97112 only 95992 and not get paid under Medicare. To have a blanket bundle when no other procedures may be billed that day is not logical. APTA and the Neurology Section will be lobbying the CMS to modify this position. Everyone should remember this language applies to Medicare only. You should use and try to get paid for 95992 with all other payers.

Combined Sections Meeting 2008: Las Vegas

Join us in Las Vegas for high rolling vestibular content!

Julie Tilson
PT, DPT, NCS
VR SIG Vice Chair

CSM is known for great programming and even better socializing! If you haven't made it to CSM before, this is the year to start. If you have, we can't wait to see you again – this time "It's Vegas Baby"!

Here is a list of the 'don't miss' events for vestibular therapists.

Monday, February 9th, expand your horizons and learn about vestibular rehabilitation for children at a pre-conference course sponsored by the Section on Pediatrics:

- Identification of and Intervention for Vestibular Related Impairments in Children, with Jennifer Braswell Christy, PT, PhD and Rose Marie Rine, PT, PhD, 8:00 am - 5:00 pm.

Tuesday, February 10th, update your knowledge about vestibular hypofunction and fall prevention:

- Outcome and expectations for patients with vestibular hypofunction, with Susan J. Herdman, PT, PhD, 10:30 am – 12:15 pm.
- Paying Attention, Making Choices: The Role of Cognition in Falls Prevention, with Robert G. Winningham, PhD; Mike Studer, PT, MHS, NCS; Lee Dibble, PT, PhD, ATC; and Karen McCulloch, PT, PhD, NCS, 7:00 – 9:00 pm.

On Wednesday get your questions answered about the psychology of dizziness what we mean by 'balance.' Then spend the evening mingling with fellow Neurology Section members at the Myelin Melter.

- Psychological Factors in Patients with Dizziness - Concepts, Detection, and Treatment, with Jeffrey Staab, MD; Elizabeth Grace, PT, MS, NCS, 8:00 – 11:00 am
- It's a Matter of "Balance": In Search of a Consensus Definition, with Fay Bahling Horak, PT, PhD, Roberta A. Newton, PT, PhD, Susan L. Whitney, PT, PhD, NCS, ATC, FAPTA, 4:00 – 5:30 pm.
- Myelin Melter: Neurology Section Reception and Business Meeting Neurology Section Leadership, 6:00 – 9:00 pm.

Thursday, don't miss two sessions sponsored by the Vestibular SIG.

- Defining Competency for Managing Patients with Vestibular Dysfunction. Join us for this roundtable discussion about the minimum skill set therapists should have for treating persons with vestibular dysfunction. Moderators Julie Tilson, DPT, NCS and Ray Hedenberg, PT will represent neurologic and orthopedic perspectives. Bring your orthopedic friends, 8:00 – 10:00 am.
- Arriving at a PT Diagnosis for Patients with Complaints of Dizziness. Meet the Vestibular SIG leadership and hear our featured speaker, Susan Herdman, PhD, PT. Dr. Herdman will present a paradigm for arriving at a PT diagnosis based on history and clinical examination of persons with dizziness. Her talk will cover oculomotor examination, nystagmus, the head thrust test, and vestibular function tests such as caloric, VEMPs, subjective visual vertical and rotary chair, and the signs and symptoms associated with central and peripheral vestibular system deficits, 3:30 – 4:30 pm.

There's more! Don't miss these and many more exciting posters in the exhibit hall:

- Responsiveness of clinical measures of balance, gait and self-reported disability to rehabilitation in persons with vestibular system disorders, with Susan Whitney.
- Vestibular Rehabilitation for Flight Simulator Intolerance: A Case Study, with Stephanie Vandover.
- Pilot Study: Effects of the BrainPort Balance Device in Individuals with Unilateral Vestibular Los, with Mary Murphy.
- Practice and Billing Trends Within Specialty Balance and Vestibular Programs: A Summary of Survey Results, with Marcia Thompson.
- The Effect of Predictability of Head Turns on Gait in Patients with Vestibular Hypofunction, with Courtney Hall.
- People with vestibular loss actively contribute to their falling, with JoAnn Kluzik.
- The Effects on Balance After Core Strengthening Using Pilates, with Beverly McNeal.
- The Effect of Predictability of Head Turns on Gait in Patients with Vestibular Hypofunction, with Courtney Hall.
- The Relationship between Fear of Falling and Actual Balance Abilities in Rural Community - dwelling Older Adults, with Leslie Allison.
- Balance Performance Measurement in a Response-Delayed Feedback Environment, with Maha Mohammad.
- Computer Assisted Posturography (CAP) Technology as a guide to fall prevention exercise motivation in community dwelling elders, with Meredith Harris.

Come join us for great programming and networking. Check out the rest of the program and make your reservations now at www.apta.org/csm. See you in Vegas!

Clinical Practice Guideline: Benign Paroxysmal Positional Vertigo

Kenda Fuller
PT, NCS
VR SIG Nominating Committee

The American Academy of Otolaryngology-Head and Neck Surgery Foundation provides evidence-based recommendations on managing Benign Paroxysmal Positional Vertigo (BPPV).

VR SIG Chair Susan Whitney was one of the 18 authors and represented the practice of physical therapy. Additionally, the officers of the VR SIG were invited to make comments on the guidelines.

This paper summarizes the guidelines and provides the panel's recommendations and reports each section with an Evidence Profile, graded as (A) for randomized clinical trials (RCT's) or diagnostic studies, (B) for the same studies with minor limitations and (C) for observational studies. A (D) represents expert opinion, case reports and reasoning from first principles (bench research or animal studies).

The goal stated by the panel is to improve the accurate and efficient diagnosis of BPPV and increase the use of appropriate therapeutic repositioning maneuvers, thereby reducing the use of vestibular suppressant medications and ancillary testing procedures that do not assist diagnosis. Of equal importance is the ability to differentiate BPPV from other causes of imbalance, dizziness and vertigo.

Diagnostic criteria for BPPV as part of the history and examination include:

- Reports of repeated episodes of vertigo with changes in head position
- Vertigo associated with nystagmus provoked by the Dix-Hallpike test
- A latency period between the completion of the Dix-Hallpike test and the onset of vertigo and nystagmus
- Provoked vertigo and nystagmus increase and then resolve within a time period of 60 seconds from onset of nystagmus.

When patients meet clinical criteria for the diagnosis of BPPV, no additional diagnostic benefit is obtained from vestibular function testing.

Lateral (horizontal) canal BPPV has received considerably less attention in the literature and it is felt by the panel that clinicians may be relatively unaware of its existence. Patients with a positive history but do not meet diagnostic criteria noted above should be investigated for lateral canal BPPV.

Otological disorders that may mimic BPPV are described. These can include Meniere's disease, vestibular neuritis, labyrinthitis, superior canal dehiscence syndrome and post-traumatic vertigo. Neurological causes of vertigo include migraine, vertebrobasilar insufficiency, demyelinating diseases and central lesions. Anxiety or panic disorders, cervicogenic vertigo, side effects of medications or postural hypotension need to be identified as well.

The guidelines suggest that clinicians should question patients with BPPV for factors that modify management including impaired mobility or balance, CNS disorders, a lack of home support, and increased risk for falling. According to Oghalai, nine percent of patients referred for geriatric evaluation had undiagnosed BPPV and many had fallen within the prior three months.

In my opinion, a sufficiently trained physical therapist should be able to make the differential diagnosis as described here, with the ability to refer to the appropriate medical provider when the patient does not fit the criteria for BPPV.

Intervention strategies include repositioning for both posterior canal and lateral canal. Two types of particle repositioning maneuvers (PRM) for the posterior canal have been found to be effective: the canalith repositioning procedure (CRP), or Epley and the libratory or Semont maneuvers. Outcomes of using PRM resulting in resolution of symptoms within one week are 75%. Considerable variability exists in the number of times CRP is applied for the initial treatment of BPPV, and there are not an optimal number of cycles identified in the panel's review of the literature. The conversion of posterior canal BPPV to lateral canal during treatment is identified as a risk factor.

Post treatment positional or activity restrictions do not appear to change the response rates. Persistent BPPV is addressed but again due to the lack of data, the panel did not make strong suggestions about interventions. The use of vestibular rehabilitation, including Brandt-Daroff habituation exercises may improve long-term outcomes, although even at three months the percent of recovery is below that of PRMs. Due to the increased prevalence of BPPV as part of another otology or neurological disorder, or geriatric imbalance, vestibular rehabilitation may be indicated as a part of the intervention strategy along with PRM.

Given the difference in the one week resolution vs. three month resolution, I believe that as therapists we should be aware that we can make a positive change in the lifestyle and function of individuals. Three months of decreased

functional status or lack of ability to work can be significant to our patients. Recurrence rates may be as high as 50% at five years; patients should be counseled accordingly for return for interventions and for the potential risk of falls that are associated with recurrence.

Persistence of BPPV may be indicative of other otologic or neurological disorders, and the patients should be educated to seek medical care if their symptoms change from BPPV to other conditions that may be associated. Unilateral loss of hearing should be identified as a red flag and need for immediate medical attention.

In review of the paper, most of the evidence quality is rated at a "C" based on observational studies, due to lack of well designed randomized controlled trials. Small sample sizes and subjects identified through specialty clinics limit generalization. Research needs are identified at the end of the paper.

The observation is made that the original diagnoses made in a general clinical setting may be different than that made in a vestibular specialty practice and may not prove to be accurate so treatment may not be as effective.

I believe that this paper supports the ability of a physical therapist to perform the differential diagnosis for BPPV and we are well suited to treat the imbalance and dizziness from other causes that may be concomitant. The Neurology Section is interested in the criteria for entry level education for management of vestibular disorders.

This paper supports a difference in outcomes based on ability to accurately evaluate initial symptoms. Go to http://www.entnet.org/Practice/clinicalPracticeguidelines.cfm for more information.

Ref: Oghalai JS, Manolidis S, Barth JL, et. al.: Unrecognized benign paroximal positional vertigo in elderly patients. Otolaryngol Head Neck Surg 2000;122:630-4.

Call for nominations

Pat Winkler
P.T. D.Sc., NCS
VR SIG Nominating Committee Chair

Greetings VR SIG members. Would you like to get more involved with the SIG?

A great way to do that is to serve as an officer. Both secretary and nominating committee positions are up for election this year. Each position serves a three-year term. Candidates must be Neurology section members for two years prior to running for election.

In addition to roles as described here, officers of the SIG also serve as SIG leadership. Meetings occur every two to three months in the form of conferences calls. In these meetings, we discuss information important to therapists involved in vestibular rehabilitation, such as current laws, Medicare rules when problematic, current research and how to best disseminate information to our members.

Current topics include third party payer guidelines and the new guidelines for vestibular rehabilitation and BPPV.

If you are interested or would like to nominate someone for one of these positions, email at pwinkler@regis.edu and I will email you an application. It's fun and enlightening!

Description of the Offices:

Secretary:

a. Records the minutes of all SIG meetings and conference calls

b. Maintains a record of all official actions and decisions of the SIG

c. Submits minutes of SIG meetings to the SIG officers and Executive Office within 21 days of the meeting

d. Attends the SIG meeting with the Vice President at the Combined Sections Meeting

e. Assists the Chair in preparation and submission to the Executive Committee of a three year plan for the SIG

f. Coordinates updating of Policy and Procedures Manual with the Vice President of Neurology Section

g. Provides for orientation of a successor.

Nominating Committee:

a. Only those members as specified in the Section Bylaws are eligible to serve on the Nominating Committee (Need to be a member of the Neurology Section for two years before running)

b. The Nominating Committee shall consist of three members, with each member serving for three years

c. One new member shall be elected each year

d. Members are elected via ballot prior to Annual Conference

e. The senior member of the committee shall serve as chair, unless otherwise designated by the Executive Committee

f. At the end of the term the chair will insure the successful orientation of the incoming chairperson.