VESTIBULAR REHABILITATION SIG

APTA & Academy of Neurologic Physical Therapy

IN THIS ISSUE:

Message from the Chair

Anne K. Galgon, PT, PhD, NCS
Vestibular Rehab SIG Chair

Before I start my message, please note the new updated newsletter! Thank you, **Jasmine Jackson** and **Debbie Struiksma**, the newsletter editors, who have investigated new production options and selected a new application that creates a consistent and easier access to the newsletter. Jasmine and Debbie are using the capabilities of this application to include poster presentations along with special interest articles from our members. This current newsletter features 2018 Combined Section Meeting (CSM) events and activities, however do not miss our fall newsletter that will highlight activities and posters from our summer International Conference for Vestibular Rehabilitation. Jasmine and Debbie welcome contributions to the newsletter from our members. If you have ideas or would like to write a special interest article, please contact them. I would also like to thank and acknowledge **Betsy Grace-Georgelos** for her dedication and hardwork as Co-Editor of the VRSIG newsletter. She has stepped down this year after over 10 years of service and we appreciate all she has done for the SIG.

As I finish off my 5th year of serving as the Chair of the Vestibular Rehabilitation Special Interest Group (VR SIG), I find myself more enthusiastic than ever by the engagement of our members, our initiatives, and our success at working towards advancing the practice of vestibular rehabilitation. At CSM in New Orleans, I was very honored to receive the Service Award from the Academy of Neurologic Physical Therapy (ANPT). However, I know that much of my success in service has been the result of all the members who support the VR SIG and volunteers who give their time and energy toward getting things done. I am honored to work with such a productive group.

VESTIBULAR REHABILITATION SIG OFFICERS:

CHAIR	ANNE K. GALGON, PT, PHD, NCS GALGONANNE56@GMAIL.COM
VICE CHAIR	LEXI MILES, MPT ALEXIA.MILES@FROEDTERTHEALTH.ORG
SECRETARY	JANENE HOLMBERG, PT, DPT, NCS JANENE.HOLMBERG@IMAIL.ORG
NOMINATING COMMITTEE	KAREN M. SKOP, PT, DPT, MS KAREN.SKOP@VA.GOV KURT VAN DER SCHALIE, PT, DPT KURT.VANDERSCHALIE@YAHOO.COM LINDA D'SILVA PT, PHD LINDA.DSILVA@ROCKHURST.EDU
NEWSLETTER EDITORS	JASMINE JACKSON, PT, DPT, NCS JJACKSONDPT@GMAIL.COM DEBBIE STRUIKSMA PT, NCS DSTRUIKSMA77@AOL.COM
SIG PRACTICE LIASON	COL. KIM GOTTSHALL, PT, PH.D KIM.GOTTSHALL@MED.NAVY.MIL
WEB COORDINATOR	MICHELLE GUTIERREZ, PT, DSC MGUTIERREZ28@UTEP.EDU
PODCAST COORDINATOR	MAUREEN CLANCY, PT, DPT MCLANCY1076@GMAIL.COM
SOCIAL MEDIA COORDINATOR	APRIL HODGE, PT APRILLAX@YAHOO.COM
ABSTRACT OF THE WEEK COORDINATOR	SARA OXBOROUGH, MS, PT SARAO@STOPDIZZINESS.COM
ONLINE EDUCATION COORDINATOR	RACHEL WELLONS, PT, DPT, NCS RTROMM@LSUHSC.EDU

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Message from the Chair (cont.)

Combined Sections Meeting was again a tremendous success for the VR SIG. It was great to see so many people attending the ten 2 hour programs and multiple poster presentations related to vestibular rehabilitation. Some of the program and poster content is featured in this issue of the newsletter. We had a lively group of members attending the Vertigo-Go Dinner and over 100 people attended our 6:45am Saturday morning business meeting. I want to thank the many individuals and vendors who provided items for our annual drawing. At the business meeting we recognized two of our outgoing officers **Janene Holmberg**, secretary, and **Karen Skop**, nominating committee chair. During their tenure, both Janene and Karen have served on many VR SIG and ANPT initiatives. I was also pleased to award **Janet Helminski** with the VR SIG Service award. This newsletter reviews Janet's many accomplishments and contributions that earned her this award. Thank you, Janet, Janene, and Karen for your service to the SIG.

During the Business meeting, I presented our 2017 achievements and plans for 2018. Some of the accomplishments were previously highlighted in the 2017 fall/winter newsletter. This included the success of our podcast team and the continued work of our diligent taskforce, who developed a description of advanced practice and submitted a petition to the ABPTS for a specialization in vestibular rehabilitation. Some of the upcoming events for 2018 including our very popular International Conference for Vestibular Rehabilitation in Chicago this August and our Entry-level Vestibular Rehabilitation Content Survey will be distributed this spring and summer. Our Online Educational Committee, **Rachael Wellons, April Hodge and Lexi Miles,** attended an online educational workshop at CSM and submitted a proposal to the ANPT Synapse Learning Center for intermediate level interactive learning modules in vestibular rehabilitation that they hope tp develop over the next year.

CSM 2018 marked the creation of a new Vestibular Rehabilitation Telehealth Committee, who met face to face for the first time at CSM and we welcomed **Sarah Gallagher**, the committee chair, to our leadership group. Sarah has been very successful in using technology for telehealth in vestibular rehabilitation. The committee has already planned to disseminate presentations on current and future telehealth practices via podcasts and a program at CSM next year. Sarah and the committee welcomes input from others who are interested in telehealth and vestibular rehabilitation.

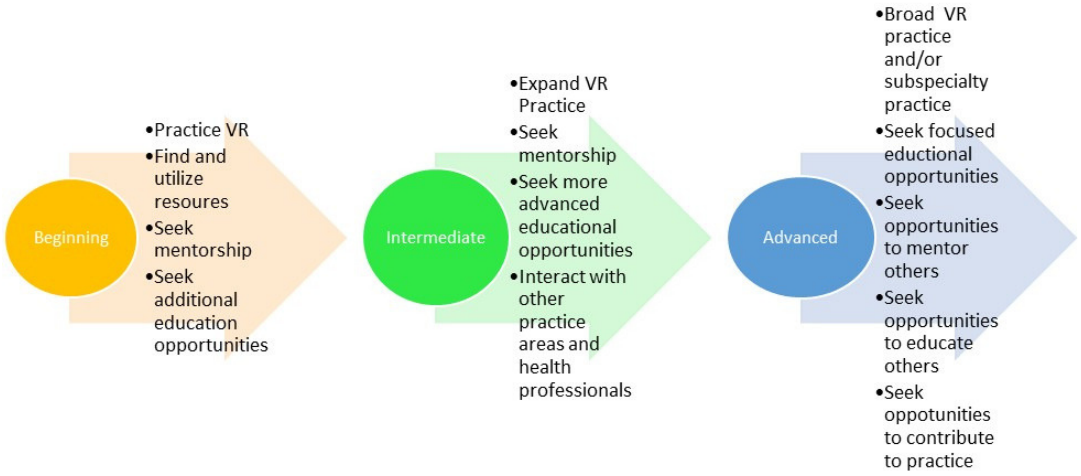
Taking it to the next level on the pathway to advanced practice

The service that I and all of our volunteers give to the ANPT and the VR SIG is helping to advance the practice of vestibular rehabilitation, but it also contributes to our own professional growth when we participate. Our member volunteers represent physical therapists who are "taking it to the next level" on their pathway to advance practice in vestibular rehabilitation.

I regularly get email messages asking how to find an educational opportunity to become certified in vestibular rehabilitation. What clinicians need to recognize is that entry-level education and a single course on vestibular rehabilitation is not the pathway to specialization. Clinicians need to seek multiple avenues to advance their practice. The VR SIG goal is to create and provide the resources and opportunities that will help physical therapists along the pathway. However, individuals should be self-assessing where they are and what their needs are. On the next page I have provided some advice on how that pathway might look and I want to recognize that the VR SIG member volunteers that I work with, exemplify these behaviors.

Message from the Chair (cont.)

Pathway to Advance Practice



A beginning level vestibular rehabilitation physical therapist has graduated from an accredited physical therapy program with entry level knowledge & competencies for vestibular rehabilitation. By the end of this summer, the VR SIG plans to provide better recommendations that define entry-level knowledge and competencies. The therapist then chooses to work in a practice environment with clients/patients who have vestibular and balance disorders. He/she seeks mentorship from within his/her own clinic or a local or national VRSIG, and begins to find and utilize resources to help their patients. The VR SIG offers multiple resources that should help therapists including, the Abstract of the Week, Dizzy Pub Fare, fact sheets, and podcasts that benefit therapists at all points on the pathway.

An intermediate level therapist has attained competence and is working to broaden clinical practice and expand his/her ability to treat complex patients with various diagnoses. He/she may choose to observe or interact with other clinical environments and/or health professionals who manage individuals with vestibular and balance disorders. The therapist should seek educational opportunities to advance knowledge of unfamiliar or new areas of practice (such as pediatrics, acute care, concussion etc.) or that emphasize more advance clinical reasoning. The VRSIG hopes to provide more opportunities for intermediate therapists as we create small group case study discussions, journal clubs, and online interactive courses that specifically address clinical reasoning.

The advanced level therapist has not only attained a broad scope of practice and high clinical reasoning, but he/she seeks opportunities that advance the practice around them, not just their own knowledge and skill. This may include finding opportunities to mentor others in VR, or to educate others through presentations and leading discussions about patient management in VR. The advanced clinician may also choose to contribute to practice through research, reviewing the literature, or by participating in academy tasks forces, SIG leadership, or committees.

This pathway is not novel and the levels along the pathway may not be as distinct as I have defined them. However, the pathway represents the development of behaviors and the opportunities that physical therapists seek who choose any specialization. As vestibular rehabilitation becomes recognized as a specialty area of practice, the VR SIG should provide opportunities that promote progress along this pathway. I look forward to the publication of the description of advanced practice, which provides detailed description of the knowledge and skills required for a clinical specialist in vestibular rehabilitation. It has been over 20 years ago since I took my first steps into vestibular rehabilitation and I can truly say that serving in the VRSIG and learning from my fellow SIG members has propelled me along this pathway. Through interacting with our member volunteers, I also see the pathways that each of them has taken. By facilitation of podcasts, developing online education, and producing newsletters and abstract of the week communications, they advance the practice of vestibular rehabilitation around them. It is great to work with you all.

Rest versus Activity: Debating the Evidence in Concussion Management

Anne Galgon,PT,PhD,NCS; Anne Mucha,PT,DPT,NCS; Paul Vidal,PT,DPT,MHSc,OCS,FAAOMPT; Karen Skop,PT,DPT,MS
By: Karen Skop,PT,DPT,MS

Combined Sections Meeting in New Orleans was a huge success with concussion management topics being very popular, headlining at least 5 of the educational sessions. In this audience encouraged participation debate style session, Dr.'s Galgon, Mucha, Skop, and Vidal presented the evidence on post concussion intervention and clinical decision-making to over 300 conference attendees. Cases were used to demonstrate how successful clinical decision-making backed by evidence could lead to optimizing outcomes.

The lecture began with **background** definitions of concussion and what might define 'recovery'. What became evident as the lecture progressed is how varied the evidence is in concussion management. From the NCAA to the American Academy of Pediatrics the consensus recommendations regarding rest versus activity have clear differences and may not be in line with the current evidence. (1-11)

The first question posed was related to **strict rest** after a concussion. The case presented discussed a female soccer player, who rested for 1 week and continued to have symptoms. Research was shown on both ends on what the medical team should advise. The evidence by Majerske et al. related a "moderate amount" of activity should be encouraged after injury (12). Furthermore, work by Thomas et al (13) and Grool et al (14) showed that strict rest could extend time to return to play. Conversely, work by Moser et al, in a retrospective design, found that strict rest improved scores on neuropsychological testing in the post concussive recovery period (15). So what is a clinician to do? The question was posed to the audience and there was a uniform vote that strict rest in the days following a concussion should NOT be encouraged; immediate removal from play in a suspected concussion and some degree of reduction in activity may be beneficial.

The next question presented was related to **when to initiate** care. The evidence by the International Consensus on Concussion in Sport (ICCS, Berlin) (16) states that interdisciplinary team assessments should begin at day 10 pending lack of symptom resolution in any athlete; other literature suggests up to 21 days. So the question arises in clinicians: should we wait for this time to pass before beginning intervention or is there a "sweet spot" in time to initiate care? In this case example, a cheerleader, 1-week post injury was discussed. In contrast with the ICCS recommendations, Physical Therapy was initiated within 1 week of her injury. Intervention was aimed at her cervical spine, beginning light aerobic activity and finally visual-vestibular exercises. Despite the acuity of the injury, the case demonstrated excellent outcomes, after only 8 visits. Evidence was presented to support each of the interventions described, in the more acute, sub-acute phases of recovery.

Finally, the question of symptom provocation was presented. The audience was asked to vote if they agreed or disagreed with the statement: "individuals should be **symptom limited** before progressing in therapy". This statement supports the ICCS return to play guidelines. Evidence was presented that in most areas of rehabilitation, including many clinical practice guidelines from the world of neurology to orthopedics, clinicians tend to provoke many symptoms from muscle spindle stretch to pain, dizziness and instability, yet therapy is not stopped. Rather therapy is typically adjusted in dosage and timing based on the patients clinical and biopsychosocial presentation. It is clear that this particular question needs more research to guide clinicians, but the evidence was presented in various research examples by Hall, Kleffelgaard, Schneider, and Reneker that provided us with some examples. Each of these researchers have done work suggesting that "familiar" symptoms should recover in 15-30 minutes after therapy session, return to baseline within the session, or control for the symptom of headache when considering dosage or intervention of any of the clinical trajectories post concussion (cervical, vestibular, ocular, anxiety/mood, post traumatic migraine or cognitive). (17-20)

Rest versus Activity: Debating the Evidence in Concussion Management (cont.)

Anne Galgon,PT,PhD,NCS; Anne Mucha,PT,DPT,NCS; Paul Vidal,PT,DPT,MHSc,OCS,FAAOMPT; Karen Skop,PT,DPT,MS
By: Karen Skop,PT,DPT,MS

There was some audience to presenter debate related to following given "protocols" by institutions, state regulation or physician recommendation regarding rest and when to initiate care. A few participants felt they must follow these guidelines. It was the panel's suggestion to point toward the evidence in rehabilitation recommendations and continue to strive for concussion as being viewed as a heterogeneous rehabilitation injury that requires a problem based or targeted rehabilitation approach. In summary, what we know is that:

- Strict rest is **not indicated** for treating concussion beyond the acute phase.
- There is evidence that **active intervention** can **improve outcomes** following a concussion.
- There is **insufficient evidence** for **requiring symptom-free status** in order to progress activity.

As with many aspects of healthcare, more research is needed in the realm of concussion rehabilitation. It is, however, becoming more and more evident that knowledge of the central and peripheral vestibular system is paramount to the successful management of this complex, yet rewarding population.

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*Complete debate Rest versus Activity Debate References available through APTA.org CSM handouts

Delayed Recovery and Medical Interventions For Recalcitrant Vestibular Disorders

Patrick J. Sparto, PT, PhD; Joseph M. Furman, MD, PhD; Susan L. Whitney, DPT, PhD, NCS, FAPTA
By: Patrick J. Sparto, PT, PhD

During treatment planning, it is important to consider negative prognostic factors that relate to recovery in persons with vestibular disorders. Negative prognostic factors may affect the duration of the episode of care and need to be identified to set realistic expectations with the patient during goal setting. The speakers will discuss multiple factors that impact recovery, including demographic, medical, cognitive-behavioral, and pharmacological factors. Medical interventions, in particular pharmacological, that can assist in the management of people with prolonged recovery will be discussed.

Several demographic factors may impact the recovery from a vestibular disorder. Although it first thought it may seem that advanced age may interfere with recovery because of the multiple comorbidities that arise at this period of life, several studies have shown that older age did not affect outcomes after acoustic neuroma resection or dynamic visual acuity recovery after unilateral vestibular hypofunction (7,15). In a more general population of individuals with vestibular dysfunction, older adults had greater dizziness handicap than young adults, they improved the same amount during vestibular rehabilitation (27). Physical activity is another factor that physical therapists may consider as impacting recovery. Although people who were more physically active had better short-term recovery after acoustic neuroma resection compared with sedentary individuals (9), we were not able to find any evidence that one's fitness influences rehabilitation outcomes for chronic dizziness. It is uncertain if the timing of vestibular rehabilitation relative to the onset of disease affects recovery. A couple of studies suggest that initiation of rehabilitation at a later time is associated with worse balance confidence and greater dizziness handicap compared with starting rehabilitation earlier (3, 12). However, other studies have shown that length of symptoms does not impact outcomes (14, 15).

A physical therapist should also ascertain the potential impact of medical factors on rehabilitation prognosis. For instance, individuals who have vestibular migraine (26, 29), bilateral vestibular hypofunction (5, 13), and mixed central and peripheral vestibular disorders (2), do not improve as much as people with unilateral vestibular hypofunction. Furthermore, people with cerebellar dysfunction improve the least (4). The studies of people with Meniere's disease are equivocal with respect to amount of recovery (25), although one article demonstrated improvement in self-report and functional measures after the symptoms had been controlled with medication (10).

Outside of vestibular disorders, other disorders may affect recovery. Individuals who have had a stroke or multiple sclerosis can benefit from vestibular rehabilitation (11, 19), but we do not know if recovery takes longer compared with other diagnoses. Similarly, people with diabetes demonstrate improvement with vestibular rehabilitation (7), but if the disease involves peripheral neuropathy, the amount of improvement is less (1). Vision disorders, including glaucoma, macular degeneration, and uncorrected refractive error, can result in increased falls risk (8, 18, 28), while binocular vision abnormalities may interfere with resolution of visual vertigo (20). Another factor to consider when developing treatment plans for people with vestibular dysfunction is if they use multifocal lens to correct visual acuity deficits. Multifocal lens use may complicate VOR gain adaptation depending on the direction of head movement. The impact on multifocal lens use on vestibular rehabilitation outcomes is unknown, but it is clear that their use increases risk for falling (17, 24).

The next category of factors that may impact recovery is cognitive and behavioral. People with anxiety or depression have lower balance confidence and longer amount of time that symptoms interfere with life activities (12). Furthermore, higher levels of anxiety or depression are associated with manifestation of persistent postural-perceptual dizziness (22). Sleep disorders also impact vestibular dysfunction, being related to greater dizziness handicap (23).

Delayed Recovery and Medical Interventions For Recalcitrant Vestibular Disorders (cont.)

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By: Patrick J. Sparto, PT, PhD

It is important to get a clear history of current and past medication use, because several medications may influence rehabilitation outcomes. Vestibular suppressants, such as valium or meclizine, and anti-depressants, may delay the time of recovery (21), and have been shown not to improve balance (16). There are medications known to be toxic to the vestibular (aminoglycosides) and hearing (cisplatin) cells, so the patient should be asked about their use. Finally, taking multiple medications is a well-known risk factor for falling, which should be accounted for in the treatment plan. People with vestibular disorders and accompanying co-morbidities may benefit from medical management in addition to vestibular rehabilitation. It is important to identify a physician in your community who can work with you and the client to make an accurate medical diagnosis and develop an optimal treatment plan. Many classes of medication can be used to target general symptoms of a person with a vestibular disorder, such as dizziness, nausea, and anxiety. Knowledge of the appropriate dose and side-effects of these medications is critical to the success of these agents, so working with an experienced practitioner is important.

In addition, there are medical interventions (examples listed in tables below) that are specific for particular vestibular disorders. One of the most common disorders, vestibular migraine, may be managed using a variety of prescription (anti-depressants, beta-blockers, calcium channel clockers, anticonvulsants, benzodiazepines, and triptans) and over-the-counter (magnesium oxide, coenzyme Q10, vitamin B2, and butterbur). Migraine-anxiety related dizziness may benefit from benzodiazepine prescription. The first-line of defense for Meniere's disease is sodium restriction and the combination hydrochlorothiazide and triamterene. In the acute phase, vestibular neuritis may be treated with corticosteroids, vestibular suppressants, and anti-nausea medications. Persistent postural-perceptual dizziness has been managed with selective serotonin re-uptake inhibitors (SSRIs) or benzodiazepines. Finally, brainstem or cerebellar stroke or degeneration may benefit from GABA-agonists.

Vestibular Migraine Medications

Drug	Dose
Antidepressants	
Sertraline	25-75 mg/day
Imipramine	10-100 mg/day
Beta blockers	
Propranaolol	80-320 mg/day
Calcium channel blockers	
Verapamil	*80-120 mg/day*
Anticonvulsants	
Topiramate	50-100 mg/day
Valproic acid	250-1000 mg/day
Benzodiazepine	
Clonazepam	0.25-0.5 mg/day
Triptans	
Rizatriptan	25 mg/day

Vestibular Suppressant Medications

Drug	Dose	Adverse Reactions
Antihistamine/Anticholinergic		
Meclizine	12.5-50 mg every 4-6 hours, oral	Sedation
Dramamine	50mg every 4-6 hours, oral	Sedation
Phenothiazine		
Phenegran	25 mg every 6-12 hours, oral or rectal	Extrapyramidal reactions, drowsiness, restlessness
Benzodiazepine		
Clonazepam	0.25-0.5mg BID, oral	Mild sedation, dependency
Valium	1-2 mg BID, 2-10 mg given acutely oral, IM or IV	Sedation, respiratory depression, dependency
Ativan	0.25-0.5 mg BID, oral	Mild sedation, dependency

Delayed Recovery and Medical Interventions For Recalcitrant Vestibular Disorders (cont.)

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In conclusion, it is important for the physical therapist to be aware of the factors that may affect the course of vestibular rehabilitation. Furthermore, the physical therapist should play an important role in being a fact-finder, patient advocate, and coordinating with the interdisciplinary team to determine the optimal medical and physical therapy management of individuals with vestibular disorders.

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*Complete References available through APTA.org CSM handouts

Understanding Vertical Diplopia – Red Flag or Muscle Weakness

Janet Helminski PT, PhD; Michael Schubert, PT, PhD; Melissa Suckow, OD, FAAO
By: Chuck Plishka, PT, DPT, NCS

The talk largely discussed means to differentiate central causes of dizziness from peripheral causes, especially a Superior Oblique Palsy. The speakers reviewed various protocols to assess acute patients presenting to emergency departments. The first method is called the TiTrATE method (1). The TiTrATE system looks at 4 areas:

- Timing of dizziness symptoms (Episodic, Acute, or Chronic)
- Triggers of dizziness symptoms (Provoked or Spontaneous)
- Targeted History and Examination (Dix-Hallpike, HINTS-plus)
- Acute Vestibular Symptoms (using acronyms HINTS-Plus, and INFARCT)

For more information about the HINTS-Plus and INFARCT protocols, see articles by Cohn (2), Kattah et al. (3), and Newman-Toker et al. (4), and Tsang et al. (5) The HINTS-Plus protocol looks at:

- Head Impulse Test
- Nystagmus
- Tests of Skew

TiTrATE Method

- Timing of dizziness symptoms (Episodic, Acute, Chronic)
- Triggers of dizziness symptoms (Provoked or Spontaneous)
- Targeted history and examination (Dix-Hallpike, HINTS-plus)
- Acute vestibular symptoms (using acronyms HINTS-plus and INFARCT)

If a patient has a negative Head Impulse test, but shows either direction-changing nystagmus or a vertical skew on Alternate Cover Test, then a stroke is likely. If the patient has a positive head impulse test, but does not have direction-changing nystagmus or a vertical skew on the Alternate Cover Test, then peripheral causes of dizziness are likely.
While not discussed in the handout, Dr. Helminski described the STANDING algorithm for differential diagnosis of acute vertigo (6). This algorithm is designed around nystagmus. If the patient has spontaneous nystagmus that are unidirectional a Head Impulse Test is used. If they have positional nystagmus, positioning tests of BPPV are used. If they do not have nystagmus, the patient is assessed for the ability to stand and walk without assistance. If they are unable to maintain an upright stance without assistance they were suspected to have central disease.
The anatomy of the visual pathway was described, as well as the musculature of eye movements. When a patient has a tilt of perceived vertical (Subjective Visual Vertical), the following attributes were described:

- A loss of one utricular neural firing results in ipsiversive head tilt, as the brain perceives a head tilt in the contralateral direction due to the intact utricle that continues to fire (Ipsiversive Subjective Visual Vertical)
- A lesion of the vestibular nuclei (superior and medial) causes ipsiversive Subjective Visual Vertical
- Lesions to the midbrain along the medial longitudinal fasciculus (MLF) in pontine and pontomesencephalic brainstem and Interstitial nucleus of Cajal induce a Contraversive Subjective Visual Vertical.
- Lesions to the thalamus or cortex will cause variable Subjective Visual Vertical, dependent on the lesion being above or below the decussation of the vestibular pathway. Lesions below the crossing tilt effects ipsiversive, while lesions above the crossing tilt effects Contraversive.

To compensate for a perceived tilt, the patient tilts the head opposite the perceived tilt with the Ocular Tilt Reaction (ORT). During the OTR, the head tilts, causing the eyes to no longer have a horizontal view of the world. To compensate, the eye on the side of tilt elevates, while the eye on the contralateral side depresses in an attempt to allow for a horizontal view of the world. At the same time, the eyes must tort in the opposite direction to the static head tilt. This ocular torsion compensates for 10-20% of the head tilts.

Understanding Vertical Diplopia – Red Flag or Muscle Weakness (cont.)

Janet Helminski PT, PhD; Michael Schubert, PT, PhD; Melissa Suckow, OD, FAAO
By: Chuck Plishka, PT, DPT, NCS

To differentially diagnose, the presenters suggest asking the patient if:

- They have diplopia in the primary gaze (straight ahead position)
- If images separate more when they look left or right
- If it worsens with eccentric gazes left or right, does it worsen while looking up or down while gazing left or right?

They also suggest observing:

- Abnormal head postures
- Eye lid abnormalities
- Position of the eye
- Size of the pupil
- Using the Bucket Test to measure Subjective Visual Vertical
- Use of the Cover Test, Alternate Cover Test, and Maddox Rod to assess tropias and phorias

The Upright-Supine Test (7,8) was described, which is used to differentiate skew deviation from trochlear nerve palsy. In this test, an Alternate Cover Test is used with the patient sitting, and then supine. In supine, the orientation of the utricle with respect to gravity leads to saturation or reduction in the overall afferent activities of the utriculo-ocular reflex, which leads to a reduction of torsion and vertical misalignment in skew deviation. With a unilateral trochlear nerve palsy, the utriculo-ocular pathway remains intact. Therefore a change in head orientation does not affect vertical torsional ocular alignment. So what does this mean for your test? If a patient has a vertical skew in sitting, but less skew while lying, the pathology is likely a central lesion. If the patient has a vertical skew while sitting, and maintains the vertical skew in lying, they have a trochlear nerve palsy.

Finally, Dr. Schubert described his research (9) into a test of subjective ocular alignment, where each eye looks through a different color filter while looking at 2 visual targets (one each for each eye). The patient is asked to get the two lines to connect in a manner that will make a straight line. Based on the patient's chosen setting of each line to what they think is straight, a measurement is taken of the difference between the lines. Dr. Schubert et al. hope their research will lead to an easy to use test for therapists to determine if an ocular misalignment exists.

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Private Payers and Coding for Vestibular Rehabilitation

Lisa Dransfield PT, DPT, MA; Beth Crowner PT, DPT, NCS, MPPA;
Wanda Evans PT, MHS, CKTP

There are a number of factors that must be considered when billing and coding for vestibular rehabilitation services through third-party payers (insurance companies). In some outpatient settings, therapists choose to be credentialed with the individual payers and enter into a contract with them in order to provide therapy services. This means the therapist is willing to abide by that particular insurance company's policy on coding, billing, and even reimbursement. This includes the payer's guidelines for vestibular rehabilitation. Therapists can choose not to contract with a private payer, which allows them the option of providing service for cash.

Recall that the CPT coding system was developed and is updated by the American Medical Association (AMA); thus, the AMA owns and maintains the CPT coding system. "CPT codes predominately describe medical services and procedures performed by physicians and non-physician professionals." (Coding and Payment Guide, For the Physical Therapist: An essential coding, billing, and reimbursement resource for the physical therapist, 2016). Code specifics, such as which CPT codes can be provided under supervision, under constant attendance, and which require one-on-one contact by the PT are determined by various committees comprised of stakeholders, providers, and others invested in the utilization of codes. Since insurance carriers utilize the CPT codes to pay therapists for outpatient services, the principles of timed and untimed codes, and other code specifics apply. However, certain non-HIPAA entities, such as workman's compensation and auto insurers are not obligated to use this code set.

Large insurers implement policies for vestibular rehabilitation based on clinical and medical practice guidelines that determine a vestibular patient's medical coverage. In an ideal world, the private insurers would make benefit coverage determinations based on evidence, review of literature, and clinical practice guidelines. Unfortunately, this is not always the case. In fact, even if the commercial payer covers vestibular rehabilitation in their medical policy, employers may negotiate a less expensive benefit package which can negate that coverage.

One of the more common themes that therapists are reporting is denial of CPT code 95992, Canalith Repositioning Procedure, the appropriate code when maneuvers are performed to decrease or eliminate symptoms of BPPV. Therapists are substituting code 97112, Neuromuscular Re-education, in an effort to get paid. (According to the 2016 Coding and Payment Guide for the Physical Therapists, Medicare does permit physical therapists to bill 97112 for canalith reposition services). Because the insurance industry is privately owned and regulated by the office of insurance in each state, specifics regarding medical policy are left to the discretion of the carriers. For instance, some workers compensation carriers will only pay for certain codes for physical therapy despite what is actually performed. Other commercial payers have denied CPT code 95992, because their policy states it is a medical code performed by medical doctors. Two of the larger third-party payers, Aetna and Blue Cross/Blue Shield, do not include 95992 on their list of covered treatments and procedures by qualified physical therapists. Coverage by these insurers appears to be predicated on whether "bones" are involved in the therapy. This disconnect results in a dilemma for therapists in which they must choose between getting paid in a timely manner by submitting codes on claims that may not be representative of the treatment performed (which is not recommended) or face denials or delays in payment.

Private Payers and Coding for Vestibular Rehabilitation (cont.)

Lisa Dransfield PT, DPT, MA; Beth Crowner PT, DPT, NCS, MPPA;
Wanda Evans PT, MHS, CKTP

One key strategy is education of providers and insurers. First, vestibular therapists should be educated on and implement the best available evidence for vestibular rehabilitation. They can then educate the public, medical doctors, and insurers on the evidence and how it impacts the patient's plan of care and response to treatment. Vestibular therapists must become experts on appropriate ICD-10 coding for vestibular impairments, which differ among commercial insurers, and be well-versed on the current rules for application of CPT codes. At the very least, therapists should be aware of what is being billed, covered, and denied. Therapists cannot depend solely on a billing department to advocate for proper billing, coding, and reimbursement in vestibular rehabilitation. Ultimately, the Physical Therapist is fully responsible for billing practice under their plan of care. The APTA website, manuals, and continuing education seminars are recommended to obtain a working knowledge from which to proceed. Sometimes, CRT is denied simply because the therapist neglects to use the correct BPPV code. For example, some insurance companies do not recognize unspecified laterality in BPPV as a billable code. Remember that CRT is an untimed code that is billed only one time per session, despite the number of canals affected and treated. If possible, avoid coding unspecified laterality in BPPV.

Most importantly, therapists must be willing to educate the private payers and even CMS (Centers for Medicare and Medicaid Services) by contacting the appropriate representatives to advocate for medical policy revisions based on evidence. A victory for all therapists treating vestibular patients occurred in 2013 when two physical therapists, Shayla Mclean and Barbara Young, appealed to their Medicare intermediary, National Government Services (NGS), to change their policy that denied coverage of VOR training in Minnesota.

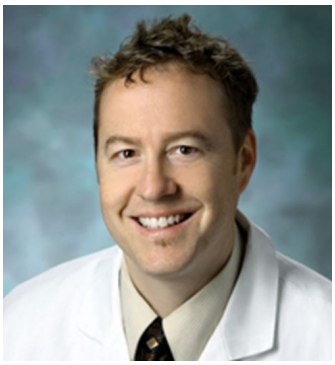
Shayla and Barbara reviewed current literature on VOR /gaze stabilization and provided 28 references in a drafted Local Coverage Determination (LCD) reconsideration to the National Government Services (NGS) in MN. In 2014, NGS confirmed that there was sufficient evidence to support VOR training when clinically indicated and changed their coverage of outpatient services. They cited that CPT code 97112, Neuromuscular Re-education, properly captures Vestibular Ocular Reflex training and would no longer be considered a non-covered service. Their Local Coverage Determination was revised and implemented immediately. This was a victory for patients with vestibular impairments and the therapist who treat them. In an ever-evolving healthcare and payment environment, awareness of reimbursement policies and action by physical therapists will be critical to receive appropriate payment in a timely manner.

Reference

1. For the Physical Therapist : An essential coding, billing, and reimbursement resource for the physical therapist, 2016 ICD-10 Copyright 2015 Optum360, LLC

Catherine Worthingham Fellow Dr. Michael Schubert, PT, PhD

Contributor: Janet Helminski PT, PhD



Michael Schubert, PT, PhD has been selected to be a Catherine Worthingham Fellow of the American Physical Therapy Association. This honor signifies Dr. Schubert's exemplary contributions to the Physical Therapy Association and profession. Dr. Schubert is an Associate Professor in the Departments of Otolaryngology Head and Neck Surgery and Physical Medicine and Rehabilitation at Johns Hopkins University School of Medicine. Dr. Schubert has made exemplary contributions to the field of vestibular rehabilitation – translating basic science into clinical practice. His work focuses on developing and implementing valid and reliable clinical tests and measures to identify vestibular function of the canals and otoliths, motor learning within the VOR and saccadic oculomotor system to determine the ideal stimulus paradigm to facilitate adaptation of the angular VOR to unilateral vestibular hypofunction, and identification of risk factors associated with falls in individuals with symptoms of dizziness. He brings analytical rigor to his research, adopts multidisciplinary approaches and collaborations, combines both technical and conceptual advances, and truly translates basic science to the clinic. He has published 73 peer-reviewed publications (first/last author 42), 5 review articles, 4 published case reports, and 15 book chapters/monographs. A Google Scholar search reports that his work has been cited 2,859 times. His H-Index, an estimate of the importance, significance, and broad impact of his cumulative research contribution, is 29. He has a research gate score of 35.73 (higher than 92.5% of all Research Gate members). He has 2 patents. Dr. Schubert manages a $1.5M grant from the Department of Defense and has managed a total of $4,240,000 over the years. He has received numerous awards for his novel work. From the vestibular special interest group, he received the service award in 2016 and Best Article Award in 2010. He was appointed to a VR SIG task force to develop, write and present the course "Expanding Neurologic Expertise: Advanced Practice in Vestibular Physical Therapy" and to a VR SIG task force to petition the American Boards of Physical Therapy Specialties for a specialist certification in vestibular rehabilitation. Dr. Schubert is on the program committee for the first International Conference for Vestibular Rehabilitation to be held in Chicago in August, 2018.

Dr. Schubert is an exceptional educator and master clinician. Since 1998 he has been on the faculty of the "Vestibular Rehabilitation: A Competency-Based Course." Thirty percent of his time is spent managing the vestibular rehabilitation clinical service within the Department of Otolaryngology – Head and Neck Surgery at Johns Hopkins. He is a patient advocate for quality of care and is a member of the medical board of the Vestibular Disorders Association.

Vestibular Rehabilitation Service Award Recipient Janet Helminski, PT, PhD

Contributor: Rene Crumley

Janet O. Helminski, PT, Phd is the recipient of the 2018 Vestibular Rehabilitation Service Award from the VRSIG of the Academy of Neurologic Physical Therapy of the APTA. Dr. Helminski is a Professor of Physical Therapy at Midwestern University and practices as a Physical Therapist at Midwestern University Multi-Specialty Clinic. She received a Doctor of Philosophy degree from Northwestern University's Institute for Neuroscience, an advanced Master of Physical Therapy degree from Northwestern University and a Bachelor of Science degree in Physical Therapy from Marquette University. Dr. Helminski has given significant time and tireless hours in service to the VRSIG. She recently helped develop the description of advanced practice in vestibular rehabilitation and worked towards the proposal for a Vestibular Rehabilitation Specialization to the APTA. She has also been an integral part of the task force for the International Vestibular Conference. Dr. Helminski has written numerous articles that have contributed to advanced practice in the treatment of BPPV. She was the 2015 recipient of APTA's Jack Walker Publication Award for her paper: Effectiveness of the canalith repositioning procedure in treatment of benign paroxysmal position vertigo. Phys Ther. 2014. And above all she is an excellent educator and clinician. The SIG wants to thank her for all she has done for the SIG and to advance practice in vestibular rehabilitation.

Thank you, Janet! Congratulations!

2018 VRSIG Business Meeting

The 2018 VRSIG Business Meeting was an excellent opportunity to review the accomplishments of the last 12 months and look forward to the projects ahead. The meeting was led by Anne Galgon, VR SIG Chair, and she honored a number of people important to the operations and work that the SIG is involved with. Karen Skop PT, DPT, MS, Nominating Committee Chair, and Janene Holmberg PT, DPT, NCS, SIG Secretary, were honored for all of their work and time volunteered to the VR SIG Board. Janet Helminski PT, PhD was given the Service to the SIG award for all of her hard work in the advancement of vestibular rehab and SIG. As always there were great items raffled off that were donated by some generous donors listed below:

- Michael Karl won **APTA Learning Center $100 Gift Certificate**
- Kelly Masterson won **"A Clinician;s Guide to BAlance and Dizziness" by Chuck Plishka PT, DPT, NCS**
- Sheri Fedor won **"Vestibular Rehabilitation 4th Edition" by Susan Herdman, PhD, FAPTA from FA Davis**
- Aleisha Theisen won **VHI Exercise Software**
- Carrie Hoppes, RJ Williams, Karla Thompson, & Eric Anson won **"Neuronotes" from FA Davis**
- Samantha Corkwell won **Subscription to the King-Devick Test App**
- Ashley Peters won **"Balance Function Assessment and Management" by Gary Jacobson, PhD, FASHA from Plural Publishing Inc**
- Eileen Garay won **PhysioTools Vestibular and Balance Exercise DVD Voucher**
- Richard O'Quinn won **$120 Year Membership to VEDA**
- Sara Oxborough won **One Year Subscription to "Journal of Vestibular Research" from IOS Press**
- Krista Keck won **Micromedical Visual Eyes 505 Monocular System Goggles and Computer**

Congratulations to All of the 2018 Raffle Winners!

VRSIG Thank You

The VR SIG can not be successful without the dedication of so many volunteers. This year the SIG board has 2 outgoing officers and we would like to acknowledge all of their hard work, time and effort in moving the SIG forward in its mission to advance vestibular rehab.

Karen Skop PT, DPT, MS is the outgoing VRSIG nominating committee chair. She has done a great job in leading the committee to identify qualified slate candidates and encouraging Individuals to become involved in the SIG by running for office. The connection from volunteer to officer is critical to VRSIG operations and Karen has done a wonderful job.

Janene Holmberg PT, DPT, NCS is the outgoing VRSIG secretary and her organizational skills have kept the VRSIG board on track. Janene's dedication to creating the minutes for each monthly board meeting is a huge commitment and has brought accountability and consistency to the team. With so many ongoing projects that the SIG has occurring simultaneously, the secretary's role is so important to moving the SIG forward in an organized manner and she has done an excellent job. Thank you again for your dedication and hard work!

The VRSIG would like to extend sincere appreciation for Betsy Grace-Georgelos' service as Co-Editor of the newsletter. Betsy has served for over 10 years and has been a driving force behind the special editions on important topics that the newsletter produces. Her dedication has helped moved the VRSIG forward in being a leader in the promotion of best practice in Vestibular Rehabilitation. She will still be a part of the special edition publications as her time allows and the VRSIG is very grateful. Betsy has been able to collect excellent content over the years and produce it in a way that is practical and meaningful for our members. Thank you again Betsy!

CALL FOR NEWSLETTER CONTRIBUTORS!!!!

Have you presented a poster at CSM?
OR
Do you wish you had more information about that poster you saw at CSM?

Consider contributing to the newsletter!!

Submit your poster presentation for a chance to be featured in the next newsletter. If you are interested in submitting your poster please contact Jasmine Jackson, PT, DPT, NCS at jjacksondpt@gmail.com or Debbie Struiksma, PT, NCS at dstruiksma77@aol.com.