Newsletter of the APTA Neurology Section, Vestibular S.I.G.

Vestibular S.I.G.

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"Oh let not Time deceive you,
You cannot conquer Time." W. H. Auden

From the Chair:

The Vestibular SIG was well represented this year at CSM. We had some wonderful programming at the conference thanks to the efforts of Diane Wrisley. Our SIG roundtable (led by Laura Morris and Cheryl Ford-Smith) on developing a vestibular rehab treatment program was both informative and entertaining. I hope you all were able to read some of the information from that session on the Neuro listserve. I want to thank all involved in our programming, especially Kathy Gill-Body, Kim Gottshall, Ed Heckler, Marousa Pavlov, and Rick Clendaniel who contributed to the business meeting.

One important outcome from CSM is our plan for the upcoming year. Our SIG will be working toward the following goals for CSM 2003:

1. Hooked on evidence is a new APTA database containing current research evidence on PT interventions. Our SIG will contribute to Hooked on Evidence by submitting abstracts to the database. 14 members have already volunteered to review an article for the database. Please contact me if you would like to join the group. Examples and a template should be available by the time you receive this newsletter.
2. We want to improve information on the SIG web page addressing reimbursement. Because reimbursement rules are so state specific, we will provide links with state reimbursement committees so that individuals can work with those skilled in addressing reimbursement issues.
3. Each SIG has been charged with contributing to the Neuro listserv journal discussion group. Julie Tilson has volunteered to facilitate a discussion on an article specific to our topic area and will coordinate with the Neuro Report editors on when the online discussion will take place.
4. Finally, we would like to offer more information on the web site regarding program development. One thought is to share the "pearls and pitfalls" of starting and marketing VR from the SIG roundtable discussion. Any other inspired ideas about this topic would be welcomed.

Neurology Section objectives of increasing use of the web for communication and to develop professional alliances were also discussed at conference. The SIG newsletter will soon arrive in the mail with fewer pages, but will include more content on the web. Annamarie Asher and Tara Denham continue to provide us with a great newsletter. An alliance with VEDA has been formed, and the alliance with the otolaryngologist association AAO-

HNS is being developed.

Annual conference in June marks the end of Jim Cavanaugh's term as secretary and Phil Blatt's term in nominations. Please join me in recognizing them for their service to the SIG. This summer also marks the end of my term as your chair. I have very much enjoyed being a part of this SIG and hope that the activities of our committee have enhanced your practice in vestibular rehabilitation. I anticipate another stimulating CSM in Florida next year, and hope to see you there too.

Educational News from the Vice Chair:

The Vestibular Special Interest Group sponsored two informative educational sessions at APTA's Combined Section Meeting in Boston, MA. Following the business meeting, Richard Clendaniel, PT, PhD moderated a panel discussion on the merits of use of high and low technology tools in the evaluation and treatment of persons with vestibular disorders. Kathleen M. Gill-Body, PT, MS, NCS provided an overview of the application of kinematic gait and motion analysis in evaluating persons with vestibular disorders. Kim R. Gottshall, COL, USAR, PT, PhD, ATC discussed her use of dynamic visual acuity testing and the use of virtual reality for improved documentation of patient outcomes. Edward Heckler, PT highlighted the augmentation of both evaluation and treatment of patients with vestibular and balance dysfunction using computerized balance equipment. Marousa Pavlo, PT presented the results of an innovative study which demonstrated that patients who were provided with an individually tailored machine-based rehabilitation program improved more than patients provided with a customized exercise program. The machine based rehabilitation program consisted of whole body and visual environment movements that create sensory mismatch during exercise. The presenters have been asked to provide the SIG with a bibliography that will be posted on the website.

The Vestibular SIG round table discussion focused on initial and continuing development of a balance and vestibular rehabilitation program. Cheryl Ford-Smith, PT, MS, NCS and Laura O. Morris, PT led the session. The group discussed ideas of how to plan and market a balance program and how to keep the momentum going once the program has been initiated. Several excellent ideas were generated including providing screenings at health fairs, newspaper advertisements and articles and sending letters to physicians. The leaders agreed to post questions and ideas on the Neuropt listserv to facilitate discussion and exchange ideas.

Please feel free to inform Diane Wrisley, MS, PT, NCS, Vestibular SIG Vice-Chair if you have ideas for programming at future meetings.

Research Review:

The Basic Symptom Inventory-53 and its use in the management of patients with psychogenic dizziness. Ruckenstein, Michael and Staab, Jeffrey. *Otolaryngology-Head and Neck Surgery, Vol. 125. No. 5, 2001*

One of the challenges in working with dizzy patients is where to refer patients when it appears that their symptoms are not due to a recognizable vestibular disorder and/or we have nothing in our treatment regime to help them. Often the visit to our clinics may be seen as the last stop for these patients. How many times have you heard the words, "then where do I go from here" ? It is an especially delicate situation if your impression is that the dizziness is psychogenic. The objective of this study was to find an accurate psychological screening questionnaire to assist in the management of patients with psychogenic dizziness.

The investigators reviewed a variety of psychological screening tests. The Basic Symptom Inventory-53 (BSI-53) was chosen because it had been widely used in medical environments that do not specialize in psychiatric care, had been validated for the detection of psychiatric disorders in patients seeking treatment for physical ailments and was easy to administer and interpret. The BSI-53 is a patient self-report of 53 questions about psychological and physical symptoms. The questions are divided into nine categories. A percentile score is derived from a comparison to established population norms. Any score that exceeds the mean population score by more than 2 standard deviations is considered to be

abnormal. An abnormal test cannot be used to identify a specific psychiatric illness but indicates the patient has a clinically significant level of psychological distress.

The subjects for this study were a group of patients who had been referred to the Balance Center of the University of Pennsylvania for evaluation and treatment of dizziness. They were evaluated by the neurotologist and were included in the study if they were felt to have a primary psychopathology resulting in the complaints of dizziness. Items used to make this determination were:

- A vague description of symptoms.
- Normal physical exam with the exception of the hyperventilation test which did reproduce the symptoms.
- Exacerbation of symptoms in certain environments such as buildings with large open spaces.
- Normal or non-contributory diagnostic tests.

These patients were then administered the BSI-53 questionnaire. They were also referred for psychiatric evaluation regardless of their score on the BSI-53. The psychiatrist was not informed of the results of the BSI-53 and made a diagnosis based on the Structured Clinical Interview for DSM (SCID). The BSI-53 questionnaire was also administered to a group of patients who had evidence of primary vestibular pathology. The presence of associations were sought between the neurotologic diagnosis and the diagnosis based on the results of the BSI-53, the psychiatric diagnosis based on the SCID and the neurotologic diagnosis and the psychiatric diagnosis and the results of the BSI-53.

A total of 66 patients were considered to have psychogenic dizziness based on the neurotologic exam. Of these 66 patients, 58 had abnormal scores on the BSI-53. Eleven patients with evidence of primary vestibular pathology and who had a similar age and sex distribution as the study population also completed the BSI-53. Of these 11 patients, 2 had abnormal scores on the BSI-53. The *p* value for this pairing was .0001.

Of the 66 patients considered to have psychogenic dizziness based on the neurotologic exam, 34 went on for psychiatric evaluation and all 34 were determined to have psychiatric pathology present based on the SCID. Of the 11 patients with primary vestibular pathology, 3 went on for psychiatric evaluation and they were all determined to be free from psychiatric pathology. The *p* value for this paring was .0001.

The third pairing was between the BSI-53 results and the psychiatric evaluation. Thirty-seven patients in total went on for the psychiatric evaluation. The 32 patients with abnormal BSI-53 were all found to have psychiatric pathology. Of the five patients with normal scores on BSI-53, two were determined to have psychiatric pathology. The *p* value for this pairing was .0002.

The neurotologic diagnosis and the findings on BSI-53 both correlated highly with each other and with the psychiatric diagnosis based on SCID. The authors admit that their findings could not be used to determine specificity and sensitivity of the BSI-53 due to the small number of patients with balance disorders and without psychopathology who participated in the study. Even with its limitations this study is valuable in that it highlights and describes a tool which may be useful in identifying patients with possible psychogenic dizziness and identifying psychiatric problems in patients with vestibular disorders. Other screening tools are used in vestibular clinics such as the Positive and Negative Affective Scale (PANAS) and the Dizziness Handicap Inventory (DHI). Further study is needed to determine, which, if any of these tools is best to use in the vestibular clinic. These tools may help us to identify psychiatric involvement and therefore increase the scope of care for our patients. In addition it may help to eliminate psychogenic dizziness as a diagnosis in some patients.

The BSI-53 can be obtained from NCS-Pearson Inc, Assessments, 5605 Green Circle Drive, Minnetonka, MN 55343-4400; phone, 800-627-7271; www.ncs.com.

Reviewed by Annamarie Asher, P.T.