

Striking the Right Balance: Balance Function Assessment and Management

Published March 9th, 2022

Erica Zaia, MSc

In this edition of “Striking the Right Balance,” our co-editor Erica Zaia reviews a new edition of a must-read textbook in Vestibular Audiology.

Michael Vekasi, AuD, R.Aud, Aud(C), FAAA and Erica Zaia, MSc, RAUD are coordinating the “Striking the Right Balance,” feature which will cover the latest information on ‘all things vestibular.’

If you would like to be more involved in all things vestibular, please check out and like our Facebook page by searching for “CAA National Vestibular Special Interest Group” within Facebook. You can also reach us by email at CAAvestibular@gmail.com.



THIRD EDITION, 2021

Gary P. Jacobson, Neil T. Shepard, Kamran Barin, Robert F. Burkard, Kristen Janky, Devin L. McCaslin

ISBN13: 978-1-63550-188-9

Reviewed by *Erica Zaia*

It is not often that you feel you are receiving a precious gift when you are assigned a job, but that is how I felt when I was asked to review “the” textbook “Balance Function Assessment and Management.” I am a known vestibular aficionado and have no shame confessing that I own a signed copy of this book’s first edition. Neil Shepard, inspiration and limitless source of knowledge, wrote, “Good luck working with this population.” I feel privileged to be still serving them and very lucky to count on the Third Edition of this book to keep expanding my knowledge and sharpening my clinical skills.

I proudly carry this heavy hardcover from home to the clinic often. It is undeniably the most comprehensive and in-depth book in our field, and the clinician who owns it will not be disappointed or short for answers. Once again, the editors did a terrific job curating the best authors for each of the 27 chapters and 4 appendices.

A highlight is the companion website where you can watch several videos accompanying chapter 10 on ocular motility testing, excellent videos on the technique to perform video head impulse test

on all planes, and a fun virtual reality posturography recording.

Vestibular enthusiasts will read the first chapter with interest. If you are like me, you may enjoy telling your patients, during caloric irrigations, how Dr. Barany conceived the caloric test and won the Nobel Prize while being held prisoner at a concentration camp.

The following chapters on practical anatomy and physiology of the systems involved in balance function encourage the clinician to strengthen their foundational knowledge and prepare them for the dense following chapters on the various types of vestibular assessment tools.

The ever-evolving and highly relevant pediatric vestibular field is well represented with a dedicated chapter on assessment and a good overview of vestibular balance therapy for children.

Another superb addition to the third edition is Appendix I - Pathophysiology Signs and Symptoms of Dizziness. Neil Shepard lets the reader into his genius mind and guides them through the vestibular diagnostic maze, beginning with collecting a particular set of symptom descriptions. It felt genuinely validating to me, given that I spend as much time on my case history as I do on testing. He then summarizes symptoms, signs, treatment, prognosis, and lesion site for several vestibular disorders, from the most common and simple BPPV, to the more obscure and rare CANVAS. This is an invaluable resource for students and clinicians as a quick reference.

Instructors and managers will greatly appreciate Appendix III, where Shepard and Burkard discuss the value of interprofessional education and practice and provide supportive evidence towards this model of care, which aligns well with the nature of the balance system.

List of contents

- Chapter 1. An Historical Perspective of the Perception of Vertigo and Dizziness and Vestibular Medicine - Christopher K. Zalewski
- Chapter 2. Ontogeny of the Vestibular System and Balance - Timothy A. Jones and Sherri M. Jones
- Chapter 3. Practical Anatomy and Physiology of the Ocular Motor System - Scott D. Z. Eggers
- Chapter 4. Practical Anatomy and Physiology of the Vestibular System - Jamie M. Bogle and Robert F. Burkard
- Chapter 5. Practical Biomechanics and Physiology of Balance - Lewis M. Nashner
- Chapter 6. Clinical Neurophysiology of Vestibular Compensation - Kamran Barin
- Chapter 7. The Vertigo Case History - Jay A. Gantz, Belinda C. Sinks, and Joel A. Goebel
- Chapter 8. Assessing Dizziness-Related Quality of Life - Erin G. Piker, Gary P. Jacobson, and Craig W. Newman
- Chapter 9. Bedside Assessment of the Vestibular System - Carrie W. Hoppes, Karen H. Lambert, and Devin L. McCaslin
- Chapter 10. Eye Movement Recording and Ocular Motility Testing - Neil T. Shepard, Michael C. Schubert, and Scott D. Z. Eggers
- Chapter 11. Positional Testing and Treatment - Richard A. Clendaniel
- Chapter 12. Caloric Testing - Kamran Barin
- Chapter 13. Rotational Vestibular Assessment - Christopher K. Zalewski
- Chapter 14. The Video Head Impulse Test (vHIT) - Ian S. Curthoys, Hamish G. MacDougall, Leigh A. McGarvie, Konrad P. Weber, David Szmulewicz, Leonardo Manzari, Ann M. Burgess,

and G. Michael Halmagyi

- Chapter 15. Computerized Dynamic Posturography: Methodology & Interpretations - Lewis M. Nashner and Neil T. Shepard
- Chapter 16. Vestibular-Evoked Myogenic Potentials (VEMPs) - Devin L. McCaslin and Gary P. Jacobson
- Chapter 17. Electrocochleography (ECochG) - Paul R. Kileny and Devin L. McCaslin
- Chapter 18. Pediatric Vestibular Testing - Kristen Janky and Neil T. Shepard
- Chapter 19. Vestibular Balance Therapy for Children - Jennifer B. Christy
- Chapter 20. Medical Management of Vertigo That Is Otologic in Origin - Brian Neff and R. Mark Wiet
- Chapter 21. Surgical Management of Vertigo That Is Otologic in Origin - R. Mark Wiet
- Chapter 22. Neurologic Origins of Dizziness and Vertigo - Joseph M. Furman and Susan L. Whitney
- Chapter 23. Behavioral Factors in Dizziness and Vertigo - Jeffrey P. Staab
- Chapter 24. Vestibular Rehabilitation - Susan L. Whitney and Joseph M. Furman
- Chapter 25. The Aging Vestibular System: Implications for Rehabilitation - Dara Meldrum and Courtney D. Hall
- Chapter 26. Topographical Localization of Vestibular System Impairment - Gary P. Jacobson, Erin G. Piker, Richard A. Roberts, Devin L. McCaslin, and Nabih M. Ramadan
- Chapter 27. Challenging Cases - Neil T. Shepard
- Appendix I. Pathophysiology Signs and Symptoms of Dizziness - Neil T. Shepard
- Appendix II. Coding and Billing - Robert F. Burkard, Neil T. Shepard, and Stuart Trembath
- Appendix III. Interprofessional Education & Practice - Neil T. Shepard and Robert F. Burkard
- Appendix IV. Specialty Rotational Vestibular Assessments - Christopher K. Zalewski