

EDCO HORUM®

PRESENTING INNOVATIVE PRODUCTS AND SERVICES TO HEALTHCARE PROFESSIONALS

VOLUME 21 NUMBER 38

SEPTEMBER 2014 REPRINT

BALANCEBACK[™] – THE LEADER IN FALL PREVENTION

Allowing all physicians to perform in-office balance testing

ow many phrases can you think of that include the word "balance"? We balance a check book; look for balance in our lives; talk about the balance of power in politics. But spare a thought for those people for whom poor balance in the literal sense can be debilitating. One company has a particularly ingenious solution to diagnosing the problem.

Dayton, OH is a city well-known for the number of patents, inventors and inventions, so it's no surprise to find that **balanceback™** is located there. In 2003, a team of world-renowned designers, engineers and clinician-educators came together with one purpose: to create and build the world's best vestibular instrumentation to improve patient outcomes utilizing evidence-based technology. Members of that team continue to be dedicated to the prevention, treatment and quantitative solution for balance and vestibular disorders.

"The iVNGTM cameras offer significantly greater resolution which provides more detailed analyses and higher quality images. There is nothing better!"

Howard T. Mango, Au.D., Ph.D.

The device developed by **balanceback™** is the intuitive Videonystamography – iVNG™, which has been used clinically for more than eleven years and is a patented technology. Validation of the iVNG™ system's accuracy and reproducibility have been documented through many clinical settings; including at Yale University, University of Miami, University of Kentucky, Georgetown University, and many other prestigious institutions.



The patented iVNG[™] system.

The patented iVNG™ technology is a standardized, recognized quantifiable diagnostic tool which is necessary to differentiate between peripheral vertigo or CNS vertigo. It also assists in identifying which side of the vestibular system is abnormal in peripheral vertigo cases. It represents the next generation of testing, has many advantages over other VNG and ENG systems, and has been granted several 510k clearances. The iVNG™ device has also been used worldwide which gives an idea of its broad applicability, with units in China, India, South America, Europe and the Middle East, as well as the USA and Canada.

Physician's experiences

So what has been the experience of using the device? Howard T. Mango, Au.D., Ph.D. is Founder and Executive Director of the Newport-Mesa Audiology Balance and Ear Institute in Newport Beach, CA. He has worked with ENG/VNG devices since the 1970's and was one of the early



Patented lightweight goggles, with dual infra-red cameras.

adopters of the iVNG™ unit ten years ago. He commented that before this was available, previous VNG devices were not very user-friendly and the software was difficult to navigate. "The iVNG™ cameras offer significantly greater resolution", he says, "which provides more detailed analyses and higher quality images. There is nothing better!"

He is mindful of the long history of diagnostic tests such as the caloric test and notes that the 1914 Nobel Prize in Physiology or Medicine was awarded to the Austrian Robert Bárány (1876–1936) for his work on the physiology and pathology of the vestibular apparatus of the ear. "What **balanceback**™ has done is to take an approach that brings sophisticated diagnostic technology into the 21st century in a way that has not been done before".

While there are many conditions that can be diagnosed with iVNG[™] (see Table 1) one in particular that has been helped by the use of iVNG[™] is Benign Paroxysmal Positional Vertigo (BPPV) according to Dr. Mango. As a result of using the iVNG[™] for this and other conditions, he says "Overall, we do a much better job

of obtaining the data and interpreting the data for our patients. The whole high tech appearance helps our image and the doctors that refer us patients like that reports are more comprehensive."

"The lightweight goggles are especially appealing to older patients, and are not cumbersome to wear. This is important as we deal with an aging population, who increasingly encounter problems with their balance."

Salvatore Gruttadauria, Au.D., CCC, Sp/A

Salvatore Gruttadauria, Au.D., CCC, Sp/A, CEO, Diversified Hearing Services, Buffalo, NY has used balanceback™ to diagnose patients' complaints of dizziness and related problems. He considers iVNG™ to be the gold standard in its field, with the ability to provide a diagnosis based on a number of sub-tests that form part of the overall testing protocol. What he feels is especially useful is the software package that provides a detailed report of the outcome of all the tests that are performed. Dr. Gruttadauria suggests that this does not constitute the final diagnosis but it guides the clinician to focus on those aspects which are far more likely to be the root cause of the problem.

The lightweight goggles are another feature that Dr. Gruttadauria likes. He says that these are especially appealing for use on older patients and with an aging population, this is important; not just in the US, but around the world. Overall, he is very impressed with how the iVNG™ functions.



Patented lightweight goggles with adjustable straps; comfortable for patients young and old.

Conclusion

Balance is a feature of our daily lives that we easily take for granted. So spare a thought for those patients who have issues with balance and know that there is a company working diligently to offer the most up-to-date and comprehensive diagnostic tests. The iVNG™ device from **balanceback™** offers cutting-edge technology to ensure a correct diagnosis is made, and has been an invaluable tool for those who use it. The result is reduced hospital re-admissions, lower costs and improved patient care. ❖

To Learn More

For more information about the iVNG[™], please call 1-877-63-DIZZY (1-877-633-4999), or visit the web site www.balanceback.com

Central Nervous System Disorders	Vestibular Disorders	Other Conditions
√ Migraine-Associated	√ Benign Paroxysmal	√ Acoustic Neuromas
Vertigo	Positional Vertigo (BPPV)	$\sqrt{\text{Viral Infections of the}}$
√ Basilar Invagnation	√ Menier's Disease	Inner Ear
√ Multiple Sclerosis	√ Labyrinthitis	√ Cerebellopontine Angle
√ Tumor	√ Ototoxic Vestibulopathy	(CPA) Tumors
√ Trauma	√ Vestibular Neuritis	
√ Stroke		

Table 1. Conditions which iVNGTM may help to identify

Medco Forum® is a registered trademark of Medco Forum, Inc. Copyright ©2014 Medco Forum, Inc. On editorial matters or to request additional copies, please call (720) 253-0736. Any reproduction, in whole or in part, without express written permission of publisher is prohibited. The information and statements directed to the products discussed herein are based solely on information and statements received from manufacturers and/or distributors thereof. The publishers do not warrant and assume no liability for the accuracy of the information contained herein. The manufacturers and/or distributors should be contacted for any and all information that the reader may desire. Send inquiries or comments regarding this publication to Medco Forum, Inc., 33963 Upper Bear Creek Road, Evergreen, CO 80439.