BalanceQuest™

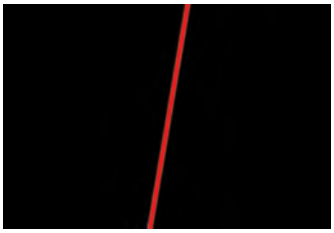
Computerized Dynamic Posturography

When the integrity of information reaching the central nervous system is compromised, the ability to stay balanced is reduced. Balance Quest allows you to assess whether your patient's balance disorder is due to misinformation or misinterpretation of sensory and motor inputs and their ability to suppress accurate information.

To Preserve and Improve Balance

When released from its static position, the Balance Quest platform essentially floats on a spring suspension allowing dynamic motion with 6 degrees of freedom of movement. This dynamic freedom more accurately mimics natural conditions that disturb proprioceptive information.

VISUAL STIMULUS OPTIONS



SUBJECTIVE VISUAL VERTICAL

This device permits the objective measurement of vertical as perceived by the subject, especially those with unilateral vestibular loss. An LED readout on the unit displays the angle, in degrees, from true vertical for the clinician. During rehabilitation, both the platform and the laser stripe are set at the angle the patient considered vertical. As the platform is gradually moved back to true horizontal and the stripe is moved to true vertical the patient is retrained to compensate for the unilateral loss.

VIRTUAL ENVIRONMENT GLASSES

These glasses are ideal for conditions C & F of the sensory organization test and for use during rehabilitation. Stimuli may appear sway referenced and/or optokinetic in nature to give a sense of rotation.

OPTOKINETIC BALL

The Balance Quest OKN is used during conditions C & F of the SOT test protocol as well as during rehabilitation to strengthen equilibrium function. The optokinetic stimulation interferes with the VOR (vestibular ocular reflex) by means of visual distortion, which in turn may confound postural control.

Micromedical™ TECHNOLOGIES INC.

Spectrum™ balance software

MICROMEDICAL'S SPECTRUM SOFTWARE PROVIDES A CONCEPTUAL SHIFT IN THE WAY BALANCE DISORDER PATIENTS ARE MANAGED BY ALLOWING A UNIQUE INTEGRATION OF ALL MICROMEDICAL SYSTEMS. PATIENT INFORMATION IS ENTERED ONLY ONCE AND SHARED WITHIN YOUR MICROMEDICAL BALANCE CENTER. DATA CAN STAY IN ONE FILE OPTIMIZING STAFF EFFICIENCY WHILE ALLOWING YOU TO PROVIDE UNSURPASSED CONTINUITY OF CARE.

To Preserve and Improve Balance

BALANCE CENTERS & FALL PREVENTION CLINICS SHOULD ALSO ACQUIRE:

VISUALEYES™ – VNG

VORTEQ™ – Active Head Rotation VOR

DVA-T™ – Dynamic Visual Acuity VOR Test

SYSTEM 2000™ – Rotational Vestibular Chair

BALANCE QUEST REHABILITATION AND ENHANCEMENT

The goal in vestibular and balance rehabilitation or enhancement, is to modify how an individual utilizes and integrates somatosensory, visual and vestibular information and motor control functions either through an adaptation process or through compensatory strategies that increase balance function.

Vestibular Rehabilitation and Balance Training Therapy should include a protocol on the Balance Quest that is custom designed for each patient to obtain the most positive functional outcome. Balance Quest rehabilitation software allows you to choose square, triangular or random target position patterns. Rehab session results are scored for accuracy. In addition to the target pattern, degree of difficulty and the interval between target jumps, other parameters like the stability of the platform or optokinetic pattern projection can be set, allowing the clinician to train the subject under a variety of conditions.

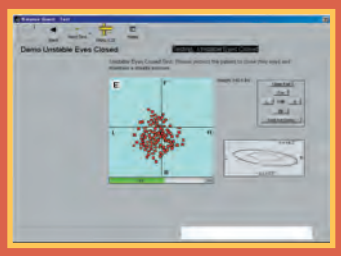
BALANCE QUEST ASSESSMENT

The Balance Quest assessment software measures center of pressure in the X,Y, Z planes plus pitch and roll axes for unparalleled information about the direction and amplitude of sway. The information allows you to identify fall risk factors, work related disequilibrium and disorders of the central nervous system through the Sensory Organization Test (SOT) and Limits of Stability (LoS) Test.

SENSORY ORGANIZATION TEST

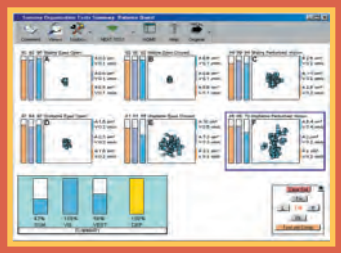
	EYES OPEN	EYES CLOSED	VISUAL DISORIENTATION
STABLE	A	B	C
UNSTABLE	D	E	F

TEST SCREEN



The subject's sway is plotted during each test condition of the SOT. In addition, the tilt of the platform can be monitored during unstable test conditions while a fall can be marked by the clinician in the appropriate directions for each test.

RESULT SUMMARY



The results of each of three trials are displayed giving you information about average sway velocity and sway area. The software then summarizes the extent of reliance on each of the sensory components measured, somatosensory, visual and vestibular (the higher the score the better) as well as a measure of how visually dependant the subject is (the lower the score the better).

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