



Myokinematic Restoration – An Integrated Approach to Treatment of Patterned Lumbo-Pelvic-Femoral Pathomechanics

www.posturalrestoration.com

Course Description:

This advanced lecture and lab course explores the biomechanics of contralateral and ipsilateral myokinematic lumbo-pelvic-femoral dysfunction. Treatment emphasizes the restoration of pelvic-femoral alignment and recruitment of specific rotational muscles to reduce synergistic patterns of pathomechanic asymmetry. Emphasis will be placed on restoration, recruitment and retraining activities using internal and external rotators of the femur, pelvis and lower trunk. Identification and isolation techniques to inhibit overactive musculature will enable the course participant to restore normal resting muscle position. Participants will be able to immediately apply PRI clinical assessment and management skills when treating diagnosis such as “piriformis syndrome”, right SI joint dysfunction, and low back strain.



Course Objectives:

- Outline biomechanical principles of lower half musculoskeletal dysfunction as they relate to rotational patterns of the femur, pelvis and lumbar spine.
- Describe how musculoskeletal dysfunction relates to articular chain asymmetry and patterns of synergistic compensatory activity.
- Apply examination and assessment skills to neuromuscular dyssynchrony and postural asymmetries that affect stability and function of the lower half.
- Restore synchronous activity across the lumbo-pelvic-femoral complex and improve neuromuscular motor control of the muscles that stabilize these joints.

Speaker: James Anderson, MPT, PRC



James received his Master's Degree in Physical Therapy from the University of Nebraska Medical Center in Omaha, Nebraska in 1998. He completed his undergraduate studies at the University of Nevada Las Vegas where he majored in kinesiology. James is currently practicing at ProActive Physical Therapy in Burley, Idaho. ProActive Physical Therapy is one of the first clinics in the country to be designated a Postural Restoration Certified Center. Over the years James

has provided course instruction and consultation to hundreds of physicians, physical therapists, athletic trainers and strength and conditioning professionals nationwide. His expertise with biomechanics has led to invitations to serve as sports performance consultant for a wide variety of collegiate and professional athletic organizations. James' passion for educating students, clinicians, and other medical professionals has led to appointments as clinical instructor for several graduate programs and guest lecturer for a wide variety of local, regional, and national events. James was a member of the first class to earn the designation of Postural Restoration Certified (PRC) as a result of advanced training, extraordinary interest and devotion to the science of postural adaptations, asymmetrical patterns, and the influence of polyarticular chains of muscles on the human body as defined by the Postural Restoration Institute®.

<http://posturalrestoration.com/speakers/bio/james-anderson/>

Course Schedule:

21 July, 2012

- 7:30 - 8** Registration
- 8 - 9** Left Anterior Interior Chain (AIC) Pattern & Pelvic Joint Dynamics
- 9 - 10** Lumbo-Pelvic-Femoral Capsuloligamentous Issues
- 10 - 10:15** Break
- 10:15 - 12** Femoral Internal & External Rotators
- 12 - 13** Lunch
- 13 - 14** Myokinematic Influences on the Pelvis & Femur
- 14 - 15** Examination Tests & Assessment
- 15 - 15:15** Break
- 15:15 - 16:15** Examination & Assessment (Lab)
- 16:15 - 16:30** Repositioning Through Integrated Isolation Demonstration

22 July, 2012

- 7:45 - 8** Sign-In
- 8 - 10** Myokinematic Hierarchy
- 10 - 10:15** Break
- 10:15 - 12** Left AIC Related Pathomechanics: "Piriformis Syndrome", Right SI Joint Dysfunction, Low Back Strain
- 12 - 13** Lunch
- 13 - 15** Left AIC Myokinematic Integration (Lab)
- 15 - 15:15** Break
- 15:15 - 17** Designing Specific Sequenced Home Programs

Basic Concepts of the Postural Restoration Institute®

The human body is **not symmetrical**. The neurological, respiratory, circulatory, muscular and vision systems are not the same on the left side of the body as they are on the right, and vice versa. They have different responsibilities, function, position and demands on them. This system asymmetry is a good thing and an amazing design. The human body is balanced through the integration of system imbalances. The torso, for example, is balanced with a liver on the right and a heart on the left. Extremity dominance is balanced through reciprocal function; i.e. left arm moves with right leg and vice versa.

Postural Restoration Institute® (PRI) trained therapists recognize these imbalances and typical patterns associated with system disuse or weakness that develops because of dominant overuse. This dominant overuse of one side of the body can develop from other system unilateral overuse. For example, if the left smaller diaphragm is not held accountable for respiration as the right is, the body can become twisted. The right diaphragm is always in a better position for respiration, because of the liver's structural support of the right larger diaphragm leaflet. Therefore, the left abdominals are always important to use during reciprocal function, such as walking, to keep the torso balanced.

Keeping the right chest opened during breathing is also challenging since there is no heart muscle inside the right side of the chest. Standing mainly on the right lower extremity to offset the weight of the left upper torso, assists in moving the pelvis forward on the left and the shoulder complex down on the right. This asymmetry compliments the special functions of the two sides of the brain. Although the two sides (hemispheres) of the brain share responsibilities for some functions, each hemisphere has its own "specialties". Each hemisphere controls the opposite side of the body. The left brain has more responsibilities for speech and language and thus the right upper extremity becomes a dominant extremity in communication, growth and development. PRI trained therapists recognize when this normal pattern is not balanced sufficiently with left extremity neurologic and muscular activity.

When these normal imbalances are not regulated by reciprocal function during walking, breathing or turning, a strong pattern emerges creating structural weaknesses, instabilities, and musculo-skeletal pain syndromes. Balancing muscle activity around the sacrum (pelvis), the sternum (thorax) and the sphenoid (middle of the head) through a PRI approach best positions multiple systems of the human body for appropriate integrated asymmetrical function. All PRI trained therapists incorporate reciprocal function to reduce 'leading' with the left pelvis and right arm, and respiratory function to maximize airflow in and out of the right lung.

Vision, occupational demands, in-uterine position, etc. can all influence asymmetrical tendencies and patterns. Humpback whales bottom-feed on their right side, lemurs tend to be lefties when it comes to grabbing their grub, toads use their right forepaw more than their left, chimpanzees hold a branch up with the left hand and pick the fruit with their right hand, and humans usually balance their center of gravity over their right leg for functional ease and postural security. PRI trained therapists recognize the more common integrated patterns of human stance, extremity use, respiratory function, vestibular imbalance, mandibular orientation and foot dynamics; and balance these patterns, as much as possible, through specific exercise programs that integrate correct respiration with left side or right side inhibitory or facilitory function.

Fee: \$5,000, 20% discount for registration before 1 March 2012.

For interested candidate, please prepare the cheque in the name of HEMAX Health Products Company Limited, with your name, address, email and telephone number on the back and send to Room 1508, Hollywood Plaza, 610 Nathan Road, Mong Kok. Please visit www.posturalrestoration.com or feel free to contact Mr. LAU at 2111 2880 / on.lau@hemaxhealth.com for any questions.

HEMAX – Bringing the best courses worldwide to Hong Kong