



The UE Ranger™ was developed out of a necessity, to most closely meet the therapeutic requirements of the task. Restoring movement health amidst the multitude of physical impairments capable of delaying the healing and functional recovery processes, requires a clinical tool that can most efficiently deliver for both the patient (movement science made patient friendly) and the treating therapist (clinical skills artfully delivered).

The UE Ranger has:




- Been validated through both patient clinical trials and scientific research to offer both safe and effective interventions.
- Demonstrated the capacity to offer a functionally and clinically superior support of movement health recovery over the traditional methods utilizing pendulums, pulleys, and rigid bars.

The UE Ranger is:

- Appropriate for both Orthopaedic (musculoskeletal) and Neurological Pathologies.
- Scientifically based to support all principles of movement health recovery.
- Available under the guidance of your physician and therapist to support a patient's home exercise program.
- Reimbursable under some insurance policies (requires physician script, and receipt of purchase).

"The gift of recognizing opportunity is paved by the spirit of questioning what's before you."






Passive Range of Motion (PROM) - Therapeutic Capacity	UE Ranger™ 	Pendulums 	Forward Bow 
Patient Assisted - Functional Passive Range of Motion	Yes	No	No
Patient Assisted - Resolution of Pain	Yes	No	No
Patient Assisted - Circulatory Support of Healing	Yes	No	No
Patient Assisted - Neuro-Motor Re-Education (Functional Kinetic Chain)	Yes	No	No



Potential Positives of Executing Pendulums Versus Negative Realities

- Persons with lower back pain or orthostatic hypotension are going to either be fearful and physiologically on guard and therefore unable to relax and thus potentially complete the effort with an aggravated spine and a reflexively guarded shoulder.
- While the postural alignment and execution of pendulums offers potential pain relief through the distraction forces on the gleno-humeral joint, what if these forces become higher than the intended amount and result in an unintended strain to the joints repaired soft tissues resulting in a reflexively guarded shoulder.
- From a consideration of function and the propensity in the early stages of active movement recovery (AAROM) for patients to initiate nearly all forward movements with a compensatory shrug, the executions offered by the UE Ranger support a quieting of the habitually compensatory muscles and thus an allowance of true healing of the neuro-motor communications and subsequent biomechanics.



Active Assistive Range of Motion (AAROM) - Therapeutic Capacity	UE Ranger™ 	Pulley System 	Rigid Bar or Cane 
Gripping Required (Impedance to Naturally Executed Movement)	No	Yes	Yes
Isolated Neuro-Motor Re-Education (Involved Motor Units)	Yes	No	No
Correct Functional Biomechanics in all Planes	Yes	No	No
Closed and Open Kinetic Chain Activity in all Planes	Yes	No	No
Neuro-Muscularly Functional Rhythmic Stabilization	Yes	No	No
Supports Higher Overall Quality of Care	Yes	No	No

*** Feel free to personally, and or have your physician or therapist contact us with any questions there might be with respect to implementing the UE Ranger with your personal recovery needs. Dan S. Miller PT, MS**



Scientific research and clinical testing have validated the capacities of the UE Ranger to effectively utilize the science of movement health to heal



Cincinnati SportsMedicine Research and Education Foundation Cincinnati, Ohio - 2008

A Randomized Trial Comparing Two Devices To Regain Full Motion Following Arthroscopic Subacromial Decompression For Shoulder Impingement

Sue D. Barber-Westin, Thomas N. Lindenfeld, MD, Michael McCormack, PT

Purpose: To compare passive shoulder elevation and external rotation between patients who use the UE Ranger to those who use a cane for passive ROM exercises after arthroscopic subacromial decompression for shoulder impingement.

Results: There was a significant difference between groups in the mean time of return to full motion and the mean time of return to full activity. For both variables, the UE Ranger group had superior results.

Return to Full Motion:

Cane 5.2 ± 1.3 weeks

UE Ranger 3.0 ± 1.3 weeks

P = 0.01

Return to Full Activity:

Cane 9.7 ± 4 weeks

UE Ranger 4.8 ± 1.2 weeks

P = 0.006



UK Comparing Muscle Activity During Post-Surgical Range Of Motion Exercises

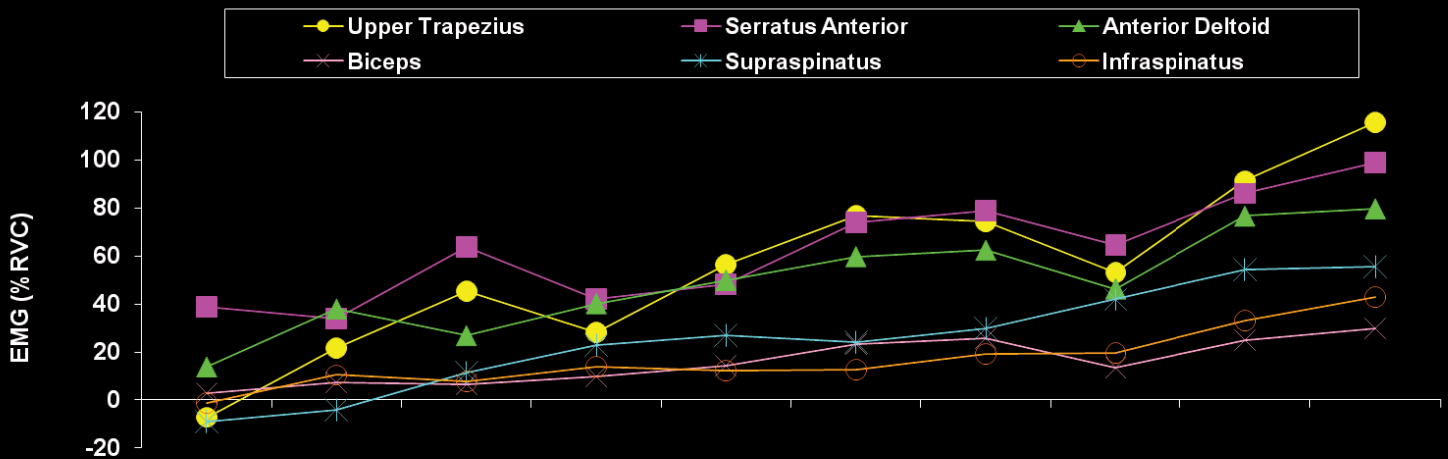
University of Kentucky - 2008

TL Uhl, TM Muir, CD Melton - Division of Athletic Training

AJ Nitz - Division of Physical Therapy

SD Mair - Division of Orthopedic Surgery

EMG Activation by Muscle



Pendulum

UE Ranger supported passive shoulder elevation

Forward Bow

UE Ranger supported active shoulder elevation

Rope and Pulley

T-Bar

UE Ranger supported humeral elevation

UE Ranger supported active vertical elevation

Wall Walk

AFE

PROM

AAROM

AROM

The UE Ranger demonstrating both its capacity to safely support early post-surgical mobility as well as a graded progression of muscular facilitation depending on its diverse and functional applications.