

May 06, 2013

I, Max L. Morton PhD, LPT, ATC offer this un-compensated report on our long-term use of the Pneubounder out of enthusiasm for the efficacy, safety and novelty of the equipment. Over the past eight years I have used the Pneubounder widely in a clinical setting with a very diverse patient population. The machine is put to constant use and the very few times it was unavailable while being serviced, all clinical staff and patients alike missed it. We have experienced no untoward events with any patients. The mechanisms of the machine allow us to build programs in a progressive manner and for the patient to control their exercise exertion to their own personal tolerance.

Our experience with the Pneubounder has been very positive for the rehabilitation of many lower extremity conditions. HR physical therapy staff has used the machine on many different conditions requiring prescription exercise routines. Those conditions include total joint replacements such as ankle, knee and hip. *The unique design of this particular piece of equipment allows individuals to progress without undue joint stress, while increasing dynamic range of motion, building muscle strength and cardiovascular conditioning. We could and often do isolate muscles around injured joints for strengthening. But the Pneubounder allows us to train multi-joint movement, in upright postures, with timing and graded variance of balance perturbations for greater transference of strength to activities of daily living and for getting patients back to functional mobility faster.*

We also run fitness and sports-performance programs for post-rehab programming. We've had high-level athletes from young and old, from all sports venues incorporate the machine to improve vertical leap, balance, neuromuscular control, and cardiovascular conditioning. Clients love the fun, vertical motion.

The concentration of the movement focuses on the quadriceps, gluteus maximus and plantar flexors. Core strengthening on the machine can be done in a fun, non-threatening manner. Balance training is easily incorporated in the patients' use of the machine and is embedded as part of the patient's exercise process on the equipment. The motor pattern is the up-right squat form exercise, supporting walking, squatting, stepping and standing up, all fundamental ADLs necessary for functional mobility. Lastly, we use the machine with a performance and fitness clientele and it's been a great alternative to sport cords or weighted jump squats due to the multiple safety features the machine offers and the variability of use.

The Pneubounder is one of the most flexible all round pieces of equipment that I have used personally and professionally in my 50 plus years in this business. The versatility of the machine allows for either targeted joint-muscle work or whole body, multi-joint movement, which means we can incorporate the machine as part of an exercise program or as a stand-alone exercise station. Set-up and transfer time on and off the machine is a snap and that makes the equipment even more practical for moving patients on and off or for using the machine in circuits with our fitness clientele. My impression of this machine is very positive! The usage of the Pneubounder is up to the creativity of the therapist and trainer. Contact me if you have questions about the Pneubounder.

Max L. Morton PhD, LPT (CO 312), Retired ATC

