

ALTER-G

With the New Year starting at a blistering pace and the achievement of 2011 behind us, we can only but look back at to the introduction of the Alter-G Anti-Gravity Treadmill into the South African market.

During mid-2011 the Alter-G was presented to the medical community claiming to be a “miracle” device which aids the treatment of injury, disease and post-surgical rehabilitation. The promise of having patients “running on air” to aid in recovery was received with some scepticism. Having now had the chance to incorporate this therapy into medical treatment – impressions have definitely turned a full 180 degrees.

The Alter-G utilizes an air blower that is linked to numerous sensors within the treadmill; air is passed into a pressure-controlled chamber with sensors providing constant feedback, the result is the user being gently lifted. The unweighting of the user may be manipulated from 100% to 20% of their own body weight.

Although this may sound like rocket science, this principle of differential air pressure technology allows users to walk or run with less ground reaction force.

What does this mean for the patient?

Patients are now able to regain early restoration of gait mechanics, maintain / improve cardiovascular fitness and with train under gravity-reduced conditions, this minimizes detrimental forces that are translated from the ground up.

The Centre for Sports Medicine & Orthopaedics in Rosebank, Johannesburg has been employing the Alter-G as part of the rehabilitation process of patients since its introduction into the South African market. Specialising in orthopaedic injuries, sport medicine and post-surgical rehabilitation, patients who have incorporated the Alter-G into the rehabilitation have commented on the positive benefits.

Some of the conditions that have integrated the Alter-G as part of their treatment and rehabilitation at The Centre for Sports Medicine & Orthopaedics include:

- Hip, knee and ankle arthroscopy and / or reconstruction

- Hip and knee arthroplasty

- Muscles, tendons and ligament injuries as well as post-surgical rehabilitation

- Stress fractures around the pelvis, femoral neck and foot as well as open reduction and internal fixation of lower limb injuries.

- Neurologic conditions (i.e. multiple sclerosis and partial spinal cord lesions)

As with many of these conditions protective weight bearing during the early phase of recovery has been clinically proven to reduce the intrinsic forces that are created with walking and running. By incorporating the Alter-G in one is able to accurately educate and rehabilitate correct GAIT patterns, restore / regain muscle function and provide a protective environment to allow the patient the freedom to exercise.

Patients with neurologic conditions that result in weakness of lower limbs and a disruption of normal GAIT are now able to exercise / re-educate those muscles in a reduced gravity environment. This translates into improved muscle function and emotional “well-being”. In

one particular case, we have been able to provide a safe protected walking environment to help combat bone demineralisation in the pelvis and lower limb as seen when a person does not weight bear for prolonged periods.

Top athletes from both the local, national and international sporting arenas have used the Alter-G, all of which have been reported that they are “impressed with the benefits”.

In summary, The Alter-G Anti-gravity is a fantastic component to treatment those who are serious about health and recovery from surgery or injury, it offers a revolutionary approach to rehabilitation, the ability to defy gravity and work towards regaining function like never before.

Written By:

Barry Getz

Centre for Sports Medicine