

THE **NEED** AND **ADVANCEMENT** OF TECHNOLOGY IN THE FIELD OF PHYSICAL THERAPY (CODE : PCJ 22)

ABSTRACT

New technologies in rehabilitation with the hope of improved outcomes , better patient compliance , safety and early return to functional performance has made it important for therapists like us to include it in our day to day practices. This poster would shed light upon the Anti-gravity treadmill.

MANUAL AND MOTORIZED TREADMILL

Commonly used in Rehab clinics , gyms and at homes.

Disadvantages :-

- 1) Joint Stress
- 2) Total body weight on injured soft tissues and fascia.
- 3) Walk , don't run
- 4) Strain on muscles.

WHAT TO DO ?

Weight and therefore gravity is public enemy number one for many joint conditions. The resulting discomfort is not only painful , but can create a pathway to additional problems from over use or adopting a sedentary lifestyle to avoid those activities altogether. By integrating the antigravity treadmill in the rehab program , the patients can enjoy a rigorous cardiovascular workout and strengthen the muscles in the lower body without inflicting the damage on joints that would be incurred with "full gravity".



ANTI-GRAVITY TREADMILL

PRINCIPLE :-

- Based on NASA's Differential Air Pressure Technology
- Uses unloading and progressive loading of muscles to improve gait and balance.



ADVANTAGES :-

- 1) Minimizes the risk of injury during rehab
- 2) The stress laid on the soft tissues and joints is greatly reduced
- 3) Rehab with less pain
- 4) Walk/run as low as 20% of body weight
- 5) Patient is much more confident to walk post-operatively

KEY POINTS AND HOW TO USE :-

- Gently unweight your patients from 100% to as low as 20% of their body weight precisely in low impact , pain free movement
- Unique technology allows for normal gait and balance in variety of impairments
- Real time gait data , pain recording and live video monitoring improve clinical decision making
- Improves productivity



CONCLUSION :-

In this advancing era it has become important to highlight and adapt to these new technology to improve standardization and outcomes for patients.