



Inversion-Eversion moments supported by TayCo Braces

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“The TayCo External Ankle Brace is comparable to a walking boot. The advantage over the walking boot is the ability to allow flexion of the ankle by removing the locking screws.”

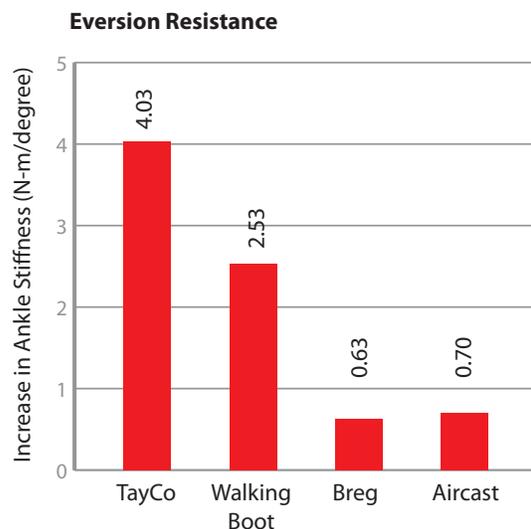
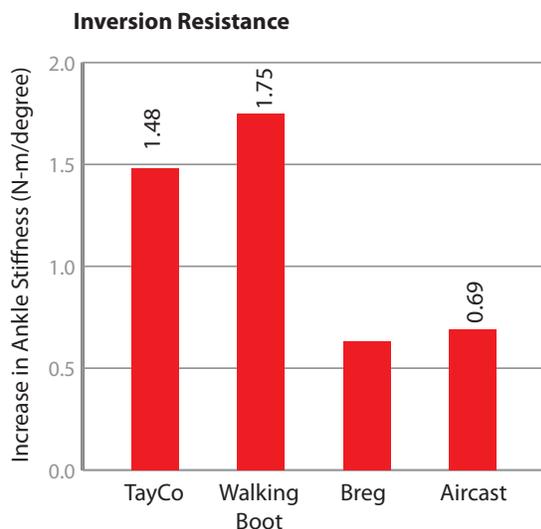
Summary

Ankle inversion/eversion moments (resistance) were tested for TayCo External Ankle Brace, a pneumatic cam walking boot, a Breg Ultra brace, and an AirCast for a neutral ankle position with a MTS 8500 load frame.

Inversion results showed a Fixed TayCo External Ankle Brace was comparable to the cam walking boot (85%), while being 2X more effective than the Breg Ultra and the AirCast.

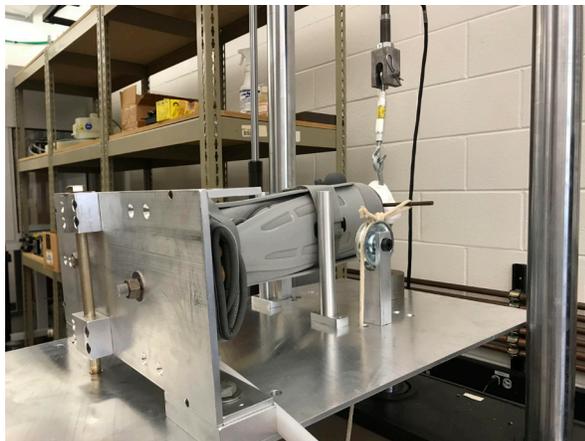
Eversion results showed Fixed TayCo External Ankle Brace provided 1.5X as much resistance as the cam walking boot, 6X the Breg Ultra, and 5.5X the AirCast.

These results show that TayCo External is a very effective ankle brace to provide inversion/eversion restriction (stiffness) under a high axial load and, therefore, possibly greatly benefit patient functional care.



Study Details

The methods used to compare the braces involved an ankle model, specifically designed fixture, and an MTS 8500 Load Frame. Each brace was affixed to the ankle model and loaded into the fixture, loads were then applied to the tibia. The displacement was measured to compare inversion/eversion resistance.



Additional Research on the CAM Boot

Proximal Injuries: Pain in majority of patients wearing walking boot, pain continued in 1/3 of patients 3 months after cessation of boot wear *"Secondary site pain after CAM walker boot wear is common. The frequency and severity of pain lessened after transition out of the boot. Yet, one-third of patients still had new or worsened secondary site pain 3 months after cessation of boot wear."* *Associated Joint Pain With Controlled Ankle Movement Walker Boot Wear* J Am Acad Orthop Surg Glob Res Rev. 2018 Dec

Low Compliance: Walking Boots only used in 28% of total daily activity *"This amounts to only 28% of total daily activity recorded while patients were wearing their RCW"* *Activity patterns of patients with diabetic foot ulceration* Diabetes Care. 2003 Sep;26