The Everstep Prosthetic Device - Restorative, Preventative Foot and Ankle Care: A Retrospective Survey

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Background

- The EverStep Prosthetic Device made by Kenetrek Boot Company is a prosthetic device in its own class. This AFO (Ankle Foot Orthosis) with combined boot feature allows exceptional stability and support. Patients can return to work/play sooner wearing this prosthetic device when compared to other standard foot gear.

- Different designs of braces are used to provide external support of the ankle which can be both hinged and unhinged.[1] In addition, solid polypropylene AFOs are used to aid in foot clearance during the swing phase of gait while bracing the ankle during stance similar to the EverStep.[2] Both passive and dynamic AFOs utilize stiffness to improve gait performance through elastic energy storage and return. The influence of AFO stiffness on gait has not been systematically investigated due to the difficulty of manufacturing devices with precisely controlled stiffness levels.[3] AFO devices have been proven to influence both sagittal and frontal plane motion. However, there has been difficulty in controlling forefoot adduction.[4] The EverStep is the next step in the evolution of AFO devices.

References

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Survey Information

- Over 40 male participants ranging in age from 30 to 70 with various pathology were dispensed the EverStep to wear, test, and evaluate. After six to eight weeks of wear, this prosthetic device was followed up with a survey. Our purpose was focused on reduction of pain, improved function, return to activity/work, comfort, and overall mobility/versatility.
- The EverStep boot was dispensed to the participants who suffered from plantar fasciitis, hallux limitus/rigidus, metatarsalgia, Achilles tendonitis, peroneal tendonitis, posterior tibial tendonitis, along with adult acquired flatfoot, foot pain and foot fatigue, ankle/joint laxity, drop foot, and arthritis of the foot and ankle from post surgical/post traumatic events.
- After six to eight weeks of wear, all of the participants were surveyed and 100% had reduction with pain and 90% had significant reduction.
- In addition, all participants had improved function as the EverStep limited unwanted motion and was joint sparing.
- At least 85 to 90% were able to return to work/activity, that they were not able to perform or enjoy with their previous footwear or prosthetic devices (including orthopedic shoes, orthotics, and AFO devices).
- All of the participants felt that the boot was comfortable and supportive.
- The response to the overall mobility and versatility of the boot was tremendous.

  - Participants enjoyed that the EverStep was one device.
  - This device can be worn on all types of terrain, including concrete or outdoor surfaces and on flat or uneven terrain.
  - The device has removable staves, medial and laterally to limit motion.
  - All agreed, it was the most supportive device they have all worn.

Results

- The EverStep was determined to be an effective prosthetic device.

Characteristics of the EverStep Prosthetic Device

Conclusion

- This prosthetic device treats a variety of diagnoses and allows the patient greater mobility. The device has been shown to decrease pain and stress by providing excellent stability and support. As a joint sparing device, motion is restricted at the sagittal and frontal planes. EverStep is cost effective and can be used as an AFO device and footwear concurrently. EverStep is GSA approved.