



# SPORT

### REHABILITATOR™

The Future Standard of Care in the World of Knee Bracing

## IMPROVE PATIENT OUTCOMES!

- Increases quadriceps and hamstring strength
- Accelerates recovery
- Provides superior support, comfort and stability
- Reduces pain and inflammation
- Improves knee extension
- TREATS CHRONIC KNEE PAIN AND WEAKNESS!

800-375-0207

BRACE SELECTION	INDICATION	UNLOADS	STABILITY	PAIN RELIEF	UNBRACED PAIN RELIEF AFTER 90 DAYS	IMPROVE QUADS / HAMSTRING STRENGTH	IMPROVES KNEE EXTENSION	IMPROVES FOOT PLACEMENT	GAIT RETRAINING WITH RETAINED EFFECT
SPORT REHABILITATOR™	Accelerate Recovery from Injury/Surgery	~	V	V	V	٧	V	V	~
COMPETITIVE FUNCTIONAL SUPPORT BRACE	Knee Support		V	V					

The SPORT REHABILITATOR™ brace was developed for people with knee injuries including acute, chronic and post-operative conditions, as well as various instabilities. This brace offers superior support and stability to the knee as well as the ability to re-establish a normal gait pattern, enhancing the rehabilitation process of the knee through a more functional neuromuscular re-education approach.

#### TKA PREHABILITATION

Strengthening the OA affected leg and normalizing gait prior to TKA is a standard protocol to improve post surgery outcomes. Use of the Sport Rehabilitator knee brace has been clinically shown to improve quadriceps strength by 54% and hamstring strength by 28% after 90 days of brace wear. This is significantly higher than exercise alone in rehabilitating the OA leg. Wearing the Sport Rehabilitator 6 to 12 weeks prior to TKA and using the brace postoperatively can significantly improve TKA patient outcomes and accelerate TKA recovery.

Clinical research indicates that OA patients lose over 50% of leg strength in the affected leg<sup>1</sup>. Post TKA, as many as 50% of patients 1 to 4 years post operatively complain of discomfort and capability limitations.<sup>2</sup> By strengthening the affected leg and normalizing gait using a Sport Rehabilitator knee brace pre-op, patients present a stronger leg at surgery. TKA recovery is accelerated and the post-op strengthening provided by the rehabilitating knee brace improved overall patient satisfaction.

#### Reasons for a SPORT REHABILITATOR™ prior to and after TKA:

- Accelerates recovery
- Strengthens leg musculature prior to surgery
- More effective than exercise alone
- Normalizes gait
- Improved patient satisfaction



- Patented dynamic dual SWING ASSIST™ facilitates initial swing phase of gait assisting the quadriceps with knee extension.
- o For the ACL patient with a quadriceps avoidance gait pattern, the dual SWING ASSIST™ provides assistance in the critical open chain component of knee extension where undesired anterior translation of the tibia occurs. This can prevent or correct quadriceps avoidance gait, maintaining proper firing patterns and accelerating the post-injury or post-surgical rehabilitation process.
- o For other knee injuries that have an effusion, the dual SWING ASSIST™ provides the same assistance with knee extension, but in this scenario the re-establishing of a normal gait pattern enhances the rehabilitation process of the quad through a more functional neuromuscular re-education approach. By assisting the quad in the open chain component of gait, the stride is lengthened, allowing a proper closed chain (eccentric loading) component and re-establishing the proper muscle firing sequence.
- Unique adjustable **pneumatic bladder system** distracts and supports the knee joint, reducing pain and inflammation while providing exceptional support.
- ROM control hinge allows for precise control of extension and flexion if needed.
- Rotating thigh cuff provides superior comfort and support.



Call 800-375-0207 to order or for more information.





# ELITE

REHABILITATOR™

The Next Step in Foot Drop Rehabilitation

- Controls foot drop and improves foot placement
- Facilitates gait rehabilitation
- Improves proprioception and encourages increased volitional use of leg muscles
- Accommodates plantar flexion tone
- IMPROVEMENTS RETAINED UNBRACED!

800-375-0207



## ELITE REHABILITATOR™

### An innovative gait rehabilitating foot drop solution

There are many carbon fiber ground reaction force dynamic AFOs available to correct foot drop. However, when the device is removed, there is little to no "carry over" un-braced. The device creates the necessary dorsiflexion of the ankle for the patient, but does not provide a stimulus for self-activation of the patient's ankle muscles. The Elite™ AFO REHABILITATOR™ provides dorsiflexion and lower leg extension dynamic assist while facilitating muscle activation in the affected leg to promote muscle re-learning when the brace is worn. Over several months, many patients exhibit "carry over" with unassisted improved dorsiflexion unbraced! The patented Elite™ AFO REHABILITATOR™ is the only known rehabilitating dynamic AFO available in the world.

#### **Features:**

 Provides perturbation therapy with each step to facilitate patient muscle activation during gait. The more flexible footplate design with a stiffer strut than conventional carbon fiber AFOs creates an upwards "pop" at toe off that facilitates a reflective muscle activation stimulus similar to perturbation "tilt" therapy. This sensori-motor facilitation technique allows the patient to re-learn active ankle dorsiflexion over time.

- Perturbation therapy has been clinically proven to facilitate motor re-learning in stroke patients over time with repeated training<sup>1</sup>. Without a sensori-motor stimulus, many patients with significant proprioceptive motor deficits are unable to volitionally control correctly sequenced ankle movement.
- Provides excellent dorsiflexion assist and lower leg extension assist. The more flexible foot plate accommodates mild to moderate equinovarus spasticity patterns, diminishing spasticity over time with routine use.
- Daily use corrects learned hemiplegic gait biomechanics, incrementally improving gait over time. Some patients require use of a gait rehabilitating knee brace providing sensori-motor stimulus (SPORT REHABILITATOR™) for optimal Hemiplegic Gait rehabilitation.
- Effective for patients with TBI, cerebral palsy, and neurological diagnosis.



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