



Understanding Foot Drop

Diagnosis and Treatment

WHAT IS FOOT DROP?

First and foremost, Foot Drop is not a disease, but rather a symptom of an underlying neurological, muscular or anatomical condition. The term “Foot Drop”, or sometimes “Drop Foot”, describes the

inability to lift and control the forefoot. It typically affects only one foot but can also affect both feet and it can be temporary or permanent.



WHAT ARE THE SYMPTOMS?

Typical signs and symptoms of Foot Drop may include:

- Frequent or increased incidence of falling or stumbling
- Difficulty lifting toes or forefoot
- Vaulting toe-walking on sound side, to clear swing through of affected side
- Dragging the forefoot on the floor as you walk
- Slapping the foot to the floor with each step
- Not able to voluntarily point toes upwards and/or move ankle from side to side
- Pain, weakness or numbness in the foot or toes

WHY IS THIS HAPPENING?

Foot Drop is caused by weakness or paralysis of the muscles below the knee that lift the foot. The underlying causes are varied and symptoms may overlap. Causes may include:

- Conditions that affect the spinal cord or brain, such as Cerebral Palsy, Multiple Sclerosis or Stroke may cause Foot Drop.
- It can also result from injury to the nerves in the lower back, leg or after a trauma to the lower leg. Nerve damage may occur from a surgical procedure such as hip or knee replacement. Damage or injury to the nerves can also occur as a result from Spinal Stenosis.
- Diseases such as Muscle Dystrophy, Charcot-Marie-Tooth (CMT) or Myositis which can cause progressive muscle weakness which can contribute to Foot Drop.
- Foot drop is usually diagnosed during a physical exam by a doctor. In some cases the doctor want to have a Magnetic Resonance Imaging (MRI) test or Electromyography (EMG) and nerve study run.



TREATMENT AND OPTIONS

Treatment options depend upon what condition or circumstance has caused Foot Drop. If the underlying cause can be successfully treated, foot Drop may improve or even disappear, if not, Foot Drop may be a lifelong condition.



The goal of all treatment is to help the patient to maximize mobility and independence, with comfort, good balance and control. The most common treatment is to support the leg with a brace that fits into the shoe, referred to as an Ankle-Foot-Orthosis (AFO). There are different options depending upon the severity of the particular circumstance.

It is recommended that the AFO be fitted by an Orthotist or similar skilled expert. These devices may require a prescription from a physician.

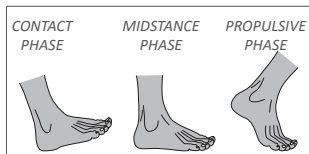
Physical therapy is an additional or combined treatment. Exercises specified for the condition and circumstance to strengthen leg muscles and maintain good movement in knee and ankle.

FES (Functional Electronic Stimulation) of the nerve that lifts the foot (peroneal nerve) can also improve Foot Drop, especially when Foot Drop is caused by Multiple Sclerosis or Stroke.



THE ALLARD AFO'S

are Dynamic Response AFO's, patented with unique design, manufactured of carbon composite materials. It stores and releases energy which assists the user through the complete gait-cycle, from heel-strike thru swing phase, similar to the normal muscle function.



ANTERIOR DESIGN

Allard AFO's extend up from footplate onto the frontal side of the leg to avoid pressure on the calf muscles and Achilles tendon, and support the lower leg thru Midstance.

LATERAL STRUT

The strut is placed on the outside of the footplate to create stability and function. It also allows for a more functional use when using AFO's on both legs.

LIGHTWEIGHT

The composition of carbon fiber, fiberglass and Kevlar makes the product extremely lightweight, which also increases patients acceptance.

THIN

The extreme thinness of the product makes it light and almost invisible under slack or trousers.

COMFORTABLE

As the shin plate comes on to the frontal surface of the leg, it provides a more comfortable design for the user.

OPEN HEEL

The open heel design allows the heel to move sideways through gait in a normal way and eliminates uncomfortable pressure on the back of the leg or heel.

DYNAMIC FOOTPLATE

The unique design, shape and layout of the footplate contributes to adaptable and fluid gait.

FITS IN SHOE

The thinness of the product allows use of normal shoemodels and avoids the need for increase of shoe size.

NOTE: there should always be some kind of interface between the anterior shell and lower leg.

THE ALLARD AFO PRODUCT RANGE

offers different options depending on the individual level of stability and support that is needed and preferred. To get the best function, compliance and comfort take into consideration different patient aspects like spasticity, stability, balance, need for support, activity, lifestyle, body type and other factors – on an individual basis.

Muscle function: **None or limited function**

Moderate function

Full function



YPSILON^{Flow} 1/2



The Flow-models provides the “early stage or active patient” a smooth transition through gait and an active and dynamic toe-off assist. Allows for a lot of motion which offers an opportunity for muscles, tendons and ligaments to function and strengthen.



ToeOFF^{Flow} 2 1/2



ToeOFF^{2 1/2}



The most commonly used AFO when more unstable ankle, maybe mild to moderate spasticity or affected muscle function above the knee. It not only keeps the foot up during swing-phase, it also gives a soft and controlled heel strike, support and stability in stance and good toe-off.



BLUEROCKER^{2 1/2}



If extra stability and security is required. Will improve balance and posture for patients with weak muscle function above the knee, with reduced control of knee and hip or when using AFO's for both legs.

All our AFO's need to be worn in combination with shoes that provides good support to the sides of your foot and heel, with laces or Velcro closure. You can use different shoes for different occasions, although be aware of that different heel heights of the shoes will change the walking characteristics of the AFO's.



There should always be some type of interface/insole between your foot and the footplate, standard or individual.

Allard AFO's are available in assessment versions as well, to be used to assess function improvement, patient acceptance and define any modifications required to optimize gait.



More product information is available at www.allardint.com .If you want to read more about different users and how they benefit from our products, please visit www.getbackuptoday.com or www.allardafo.com

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