



One Step Ahead in Neuro-Orthetics

with functional electrostimulation

The multi-talent for patients with diseases of the central nervous system such as **stroke**, **multiple sclerosis or traumatic brain injury**

Neuro-Orthetics

Neuro-orthetics encompasses orthopedic diagnosis, functional analysis, treatment, prevention and rehabilitation of musculoskeletal disorders associated with neuromotor diseases. However, there is no internationally accepted definition.

Functional Electrostimulation (FES)

Electrostimulation is generally understood as the stimulation of the human body by external electric fields. It is called functional when the contractions triggered by the stimulation are coordinated in such a way that they support a restricted or absent function.

Source: Springer-Verlag GmbH Germany T. Schick (Ed.) Funktionelle Elektrostimulation in der Neuro-Rehabilitation 2021

MEDIZINTECHNIK IN BEWEGUNG

Are you interested?

We are pleased to present the evomove® to you personally.

evomove® is a registered trademark of Evomotion GmbH Wallstraße 3 \ DE-21335 Lünebura \ www.evomotion.de/evomove

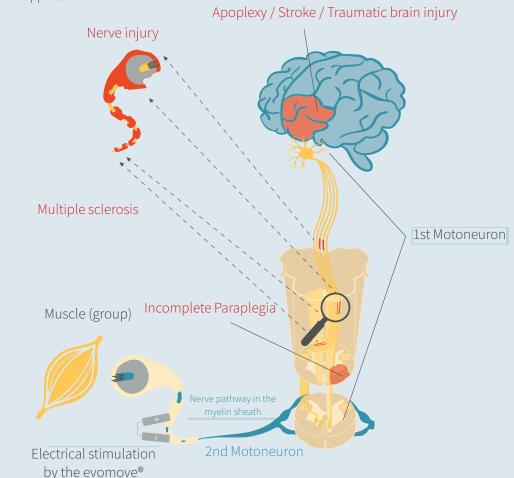
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Functionality of the evomove®

Why do we need functional electrostimulation at all?

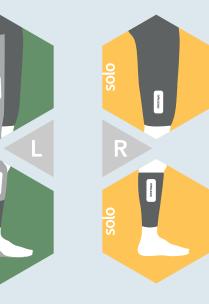
Naturally, activation is controlled and regulated in the motor cortex. In the spinal cord, these are then switched to the so-called 2nd motor neuron, which then triggers the contraction. If the 1st motor neuron (brain/spinal cord) is damaged, no activation can originate from there or be transmitted, this is then replaced by the evomove® on the responsible motor nerve.

The basic prerequisite for us to be able to use electrostimulation is therefore that the 2nd motor neuron is at least partially intact and can be electrically stimulated. The task of the care provider is to adjust the electrostimulation in such a way that patients are optimally supported.



evomwe orthokit

evomwe solokit



The evomove® can serve as an orthotic fitting or be placed solitary in a pocket on a cuff or cycling shorts we manufacture.

The evomove® orthokit combines the best of two technologies. The FES uses the body's own structures for stability, tension and dynamics and, in addition, the orthosis ensures a stable stance and guidance of the leg.

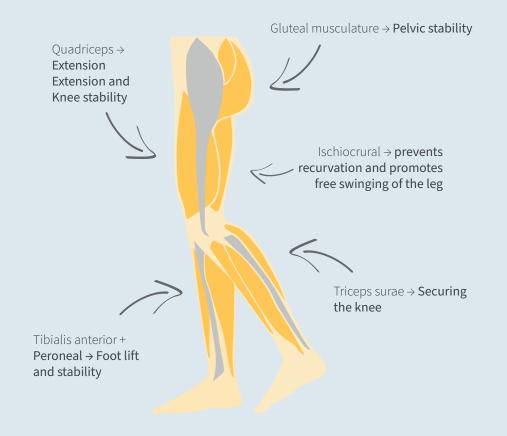
Regardless of the type of orthosis (DAFO/AFO/KO/KAFO), the evomove® can be attached to it via a bracket and thus complement the orthosis with electrical stimulation.

The **evomove** solokit is characterized by the pure use of FES without additional rigid components such as an orthosis or shoes.

Although the evomove® is very light and compact, it has a great effect on the stability and tension in the leg, by using the body's own structures, the evomove® helps patients to walk dynamically and stably.

One system - many possibilities

There are a total of **5 possible muscle groups** of the lower extremity that can be improved in 10 different gait pathologies. In addition, 2 channels / 2 muscle groups can always be stimulated per control unit.



Tonus regulation

- Functional activation of the required musculature
- Flexible adaptation of the system to patients
- Automatic adaptation to gait and speed
 - Individual fitting possible
 - Better and safer walking
 - Unobtrusive in everyday life

Components in detail

The heart of the evomove®: Our 3D inertial sensor

The control unit does everything from gait recognition to generating the electrical pulses with the help of a 3D initial sensor.

Practical: The evomove® does not require any buttons or a remote control, it is conveniently controlled via an app. This can be used by patients on iOS and Android devices.









Cuffs and "cycling" shorts

The cuffs and cycling shorts are **individually adapted** to the patient. The electrodes are welded into the fabric and are therefore always in the right place.







Thigh cuff

Cycling shorts

Become an Evomotion partner!

Introduction

Has the evomove[®] aroused your interest and you would like to take a closer look

Screening day

Training and become a partner

To be able to work with the evomove® in everyday life, you only need your own screening kit. And

Configuration



Muscle selection





Stimulus

Strategy & Timing





