Hemiparesis

Tapnish & Love

Life without hemiparesis

Nervous system: nerves allow regular passage for signals

Circulatory System: Blood passes through cerebral arteries, as normal

Hemiparesis is
caused after a stroke when
a bloodclot interferes with
nerve signals to either side
of the spinal cord. Causing, weakness on either
side of the body



A device that sends electrical pulse through electrodes to the muscles, causing them to contract



Left Sided

Hemiparesis
Nervous system:interuppted signal passage
through nerves to body parts

making it hard to control some parts

Circulatory System: Blood has

difficulty passing through

cerebral arteries due to

blood clots.

Hemiparesis affects

80%

of stroke survivors

Decreased muscle use results in

loss of muscle mass

Musko-skeletal System) (Muscle tissue)



Assistive Devices

Physiotherapy



Existing treatments is

The solution?





EMS

-Device attached to the machine
-Pads attach the weakened muscles
-Electric pulses travel through the pads into the muscles causing them to contract

PHYSIO-THERAPY

-Motors within the machine perform joint therapy 180° Servo provides a push & pull motion for the arms - Two 360° servos

- Two 360° servos provide an circular motion to legs

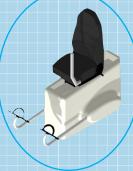
How does Electrocise work?

What is Electrocise?
Electrocise is a state of the art work-

out machine, that delivers the promising results of a physiotherapy session, right/

in the comfort of your living room

Electrocise combines the two most effective methods used in Hemiparesis recovery, to help you recover from hemiparesis. Electrocise combines the technique of phyiotherapy with the modern technology of EMS, combining these two promises faster recovery times.



WHEN COMBINED...

EMS and physiotherapy promise faster recovery time. The physiotherapy aspect of the device helps aid in getting your body used to the movement, while the EMS contracts and expands the muscles like a real workout.