### BACKGROUND STORY

# The man behind the machine

At the Rehaklinik Zihlschlacht, patients with brain damage learn to walk again with the help of a gait robot. Sports therapist Stefan Köhler introduces those affected to the equipment and monitors the therapy.

The Robotics Centre at the Rehaklinik Zihlschlacht is an open, bright space offering state-of-the-art treatment options. It is one of the world's largest neurological rehabilitation centres for effective training. This is where people with brain or nerve injuries after a stroke come to recover. However, robotassisted therapy is also useful for Parkinson's disease or multiple sclerosis or after a traumatic brain injury. Thanks to the equipment, the intensity of training can be increased tenfold, as demonstrated by the successful rapid recovery. But the Robotics Centre is also a space for meetings, where people can exchange ideas and find new courage.

### Modern physiotherapy roboticist

Stefan Köhler is a trained EKSO therapist and is able to combine his interest in technology with working with people at the Robotics Centre. He is most often

found using the exoskeleton, a mobile support corset that is attached to a patient's trunk and legs. He sets up the EKSO GT gait robot from EKSO-Bionics, then walks behind the patient during therapy and stabilises them if necessary. Without the device, as many as three strong assistants

"With the help of the exoskeleton, patients can stand upright and meet people at eye level again for the first time. For the patients, this change of perspective is a freeing experience."

Stefan Köhler

could be needed in order to support the patient's body. Thanks to the device, the patient and therapist can move around the room entirely freely.

#### On ropes on the treadmill

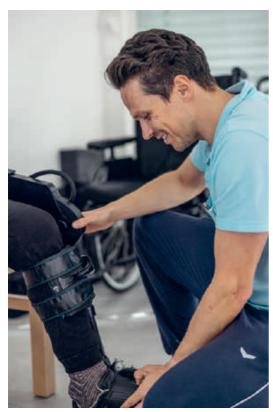
The treadmill with weight relief is another piece of equipment that Stefan Köhler uses to practice a normal gait pattern with patients. Above the treadmill is a suspension device that relieves and supports even the most severely affected according to their individual needs. Training sessions can thus be designed to be more intensive and targeted. Studies have shown that this improves both the physical and psychological well-being of patients.

#### Motivation is everything

"Stroke patients are taken out of life from one moment to the next. The motivation to learn to walk again is enormous," says Stefan Köhler. Therapy doesn't always follow a set path, however. Great progress is often made in the beginning, but as the nervous system and muscles regenerate, the visible changes become smaller. The therapist's guidance and constant support is therefore key throughout the process.

> Written by Dr Kathrin Zimmermann Photos by Kim Corpataux, Switzerland Tourism





### Total control

"When I strap the exoskeleton on a patient, they relinquish control. If I press the start button, the device stands up with them," says Stefan.

### ▼ Long-term therapy

Patient E.H. visits the clinic for therapy once a week. He has been suffering from multiple sclerosis (MS) for 25 years.





#### ◀ At eye level

With the exoskeleton, E.H. walks freely through the corridors of the rehab clinic. He stands on his own two feet and can look other people straight in the eyes. That makes him feel good.

◄ Sports therapist Stefan Köhler explains: "The machines don't replace the therapist, but rather they are a valuable, evidence-based therapy tool. We are a team of patients, therapists and robot-assisted therapeutic devices."

### ► Intensive

At the beginning, therapy with the exoskeleton was very strenuous for Stefan Köhler.

### ▼ In lockstep

"I have to adapt my movements to those of the patient so that I can guarantee stability. I really break a sweat during some of the training sessions," the therapist says.









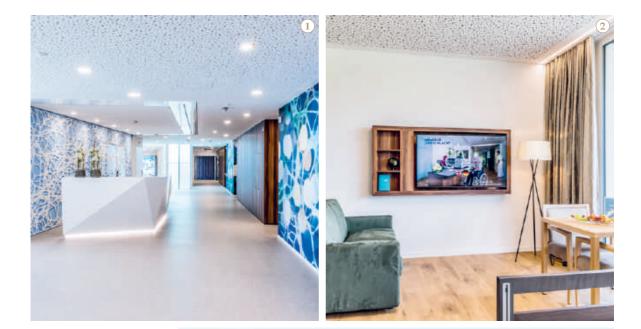
▲ Mutual trust Patient E.H. and Stefan Köhler have an excellent relationship and trust one another.

### Control is essential

The technology also has its pitfalls, as Stefan notes: "Before therapy, I always have to check very carefully that everything is set correctly and that the batteries are charged."



Further information: rehaklinik-zihlschlacht.ch/en





## "We bring you back to the things you love."

Dr Daniel Zutter *Medical Director/ Chief Physician* 







# 26 Rehaklinik Zihlschlacht

## rehaklinik ZIHLSCHLACHT

Rehaklinik Zihlschlacht Hauptstrasse 2 8588 Zihlschlacht

+41 71 424 33 66 international@vamed.ch rehaklinik-zihlschlacht.ch



myswitzerland.com/ rehaklinik-zihlschlacht

Type of hospital Private

Number of beds 179

Patients per year 1,500 inpatients 1,700 outpatients

(1) Our private clinic, the "Oasis", is designed to satisfy your need for privacy and excellent medical treatment.

2) We offer a variety of suites, from junior suites to royal suites.

- 3 Our clinic specialises in brain and nerve injuries.
- (4) Our clinic warmly accommodates you in a peaceful environment.

5 To achieve the best results, the therapies are supported by cutting-edge robotics.

### The holistic approach combining medicine, robotics and humanness makes Rehaklinik Zihlschlacht the leading specialty clinic for neurological rehabilitation.

For more than 30 years, we have been focusing exclusively on the treatment of stroke and brain injuries, as well as diseases such as Parkinson's and multiple sclerosis. We are known for our excellent personalised medical treatment programme, our holistic treatment approach and care based on humanness and respect. An interdisciplinary team of specialists brings our patients back to their day-to-day personal lives. Our therapy centre is equipped with the widest range of software, sensor and robot-assisted therapeutic devices in Europe, to ensure an optimal rehabilitation process.

Patients from around the world praise our clinic for its unique medical approach in a safe and peaceful environment. Our building for international patients, the "Oasis", takes hospitality and medical treatment to a new level.

Major medical fields and specialities

### Neurorehabilitation

- $\cdot$  Stroke recovery
- $\cdot$  Brain trauma/injuries
- $\cdot$  Paraplegia

### Degenerative nerve diseases

· Parkinson's

(ALS)

Multisystem atrophy (MSA)
Amyotrophic lateral sclerosis

# Inflammatory diseases of the nervous system

- Multiple sclerosis
- Polyneuropathy
- Guillain-Barré syndrome

### Early neurorehabilitation

- Neurorehabilitation after ICU
- $\cdot$  Early mobilisation
- PEG feeding/tracheal cannula

# ·s/

- Chief doctors/ professors per field • Dr Daniel Zutter,
- Medical Director, neurology
- Dr Stefan Schuko,
- Head Physician, neurology
- Prof. Dr Carsten Moeller, Head Physician, neurology
- Dr Claudia Baum, Head Physician Multiple Sclerosis



### Medical equipment

Largest robot-assisted therapy centre in Europe

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Memberships Swiss Reha

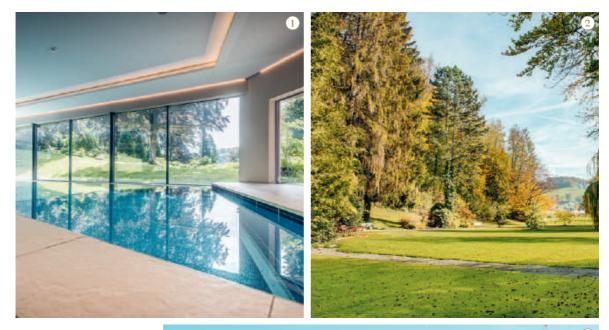


## Specific services for international patients

- Private clinic
- · International guest relations
- Transfer service
- · A-la-carte restaurant
- $\cdot$  Special meals
- $\cdot$  Prayer room
- Accommodation for relatives
- Our staff members are proficient in German, French, English, Italian and Russian

### Distance to closest airport

Zurich Airport – 50 min (77 km)





### "We live what we love – Swiss medical excellence."

Dr Stephan Schlampp Medical Director/Member of management board







# 25 Rehaklinik Dussnang

# rehaklinik DUSSNANG

Rehaklinik Dussnang Kurhausstrasse 34 8374 Dussang

+41 71 424 33 66 international@vamed.ch rehaklinik-dussnang.ch



myswitzerland.com/ rehaklinik-dussnang

Type of hospital Private

Number of beds 189

**Patients per year** 2,600 inpatients and outpatients

- (1) Relax and recharge in our modern "motus" movement pool.
- 2 During your stay at our clinic you can also enjoy your time in our park.
- (3) We provide individually tailored, high-quality treatments.
- (4) We care for your comfort in one of our hotel-like suites.
- (5) As experts for musculoskeletal rehabilitation, we offer you various types of therapy that train correct movements and help build up the respective muscles.

### We specialise in musculoskeletal and geriatric rehabilitation. With patients' wellbeing in mind, our medical specialists carefully develop patient-tailored treatment plans and goals.

Our interdisciplinary team at the Rehaklinik Dussnang consists of senior physicians and therapists who work with the latest medical insights to provide high-quality and holistic treatment. We use a wide range of therapy methods, including manual therapy, sports physiotherapy, electrotherapy, medical training therapy (MTT), water physiotherapy and innovative robotic technologies. In addition, the clinic's excellently outfitted spa area can be a great help during your medical recovery.

The hotel-like character of the clinic, offering spacious rooms, a beautiful park, a library and an excellent restaurant, adds an additional layer to its appeal. Our experienced team is extremely thorough when organising residential stays for international patients. We take great care to ensure that patients and their families feel comfortable on our premises in Dussnang.

Major medical fields and specialities

# Musculoskeletal rehabilitation

- · Orthopaedics
- Hip, knee or shoulder implants
- $\cdot$  Spine

### **Geriatric rehabilitation** • Geriatrics

### Chief doctors/ professors per field

- Dr Stephan Schlampp, specialist in orthopaedics and traumatology of the musculoskeletal system Chief Physician/Medical Director
- Dr Alena Schütte, specialist in general internal medicine (FMH), especially geriatrics, Chief Physician Geriatric Rehabilitation

Memberships Swiss Reha



## Specific services for

### international patients

- $\cdot$  Private clinic
- $\cdot$  International guest relations
- $\cdot$  Transfer service
- $\cdot$  A-la-carte restaurant
- Special meals
- $\cdot$  Prayer room
- Accommodation for relatives
- Our staff members are proficient in German, French, English, Italian and Russian

### Distance to closest airport

Zurich Airport – 40 min (57 km)