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STROKE



Cerebrolysin[®]
Reconnecting Neurons.
Empowering for Life.

The future of chronic stroke patient treatment – Interactive case discussions



SPEAKERS



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INTRODUCTION

As soon as the complications after a stroke manifest as chronic, there is little chance for patients for a long-term improvement and to regain the former quality of life. Our speakers discussed new treatment and diagnostic options that allow a prognosis about the extent of improvement in patients with chronic stroke beyond a time window of 12 weeks. Learn more about this topic in this report!

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Introduction

Katharina Sunnerhagen

The last webinar in 2022 was dedicated to the treatment options for patients with chronic stroke. The moderator of this session, Katharina Sunnerhagen from Sweden, gave a brief epidemiological overview of the global changes in recent years. It became clear that the frequency of strokes is increasing sharply worldwide and so is the number of stroke survivors.

Above all, complications in the domains of motor function, cognition, and communication are increasingly contributing to the DALYs, especially in younger stroke patients. Consequently, there are more and more patients with chronic post-stroke complications who require continuous treatments.

Since, at this late stage, endogenous plasticity alone is not enough to support a full recovery, finding adequate treatment options is a very important goal.

Finally, the main objectives of the Stroke Action Plan Europe (SAP-E) with regard to research and development priorities were presented.

Which treatment options are available?

Andreas Winkler

Andreas Winkler from Austria presented the first concept for improving the upper motor problems of chronic stroke patients and began his lecture with the introduction of the four pillars of stroke rehabilitation – Timing, Therapy, Intensity and Plasticity. He reminded the audience that the proportional recovery after stroke reaches a total of 70% and emphasized in this context that increasing plasticity correlates with a much higher proportional recovery.

The generally poor clinical data of pharmacological agents in the field of motor recovery were presented and the positive study results of Cerebrolysin were referred to. Furthermore, various non-invasive brain stimulation (NIBS) methods, such as transcranial magnetic stimulation (TMS) or transcranial direct current stimulation (tDCS), were presented, which promote the plasticity of the brain. Subsequently, the design and the results of a pilot-study were presented, which investigated the “Triple Therapy” for patients with chronic motor problems and combines traditional physiotherapy with tDCS and Cerebrolysin.

Despite the small scale of this study, the results were very encouraging, which was shown by two exemplary case reviews of this new therapeutic concept.

In his closing statement, Andreas Winkler hypothesized that endogenous brain plasticity can be stimulated again in chronic patients and referred to a larger ongoing study to confirm the results of this pilot study. You can get more information about this in the [video](#).



Combined Robot and HD-tDCS Treatment for Gait Rehabilitation

Yun-Hee Kim

Yun-Hee Kim from Seoul, Korea, first presented new data from the Korean stroke registry on ambulatory functions of patients. She highlighted that almost 35% of patients still suffer from chronic impairment of ambulatory function at 6 month and over 25% at 5 years, respectively, which is also closely correlated with the severity and age of the stroke.

The results of a recent Cochrane review on robot-assisted gait training (RAGT) showed only a low probability of improvement for chronic patients.

Subsequently, various non-invasive brain stimulation devices were presented, their mechanism of action, as well as the clinical evidence for the rehabilitation of the upper and lower limbs. With this introduction to robot training and NIBS, the study protocol of an ongoing study was presented that combines RAGT with high-definition tDCS, a new method to stimulate the motor cortex which is located in deeper regions of the brain.

Furthermore, Yun-Hee Kim presented the case study of a patient who received this combination treatment. The patient's tractography images showed an improved spinal tract integrity after therapy which indicates that this treatment approach might enhance lower limb motor recovery in patients with chronic stroke.

Summary

In this webinar, various new treatment methods for chronic stroke patients were presented. Initial clinical data suggest that the combination of treatment concepts, which include physiotherapy, devices, and pharmaceutical agents like Cerebrolysin, seems to have a considerable effect on the long-term outcome of patients with chronic stroke.



ABBREVIATED PRESCRIBING INFORMATION. Name of the medicinal product: Cerebrolysin - Solution for injection. Qualitative and quantitative composition: One ml contains 215.2 mg of Cerebrolysin concentrate in aqueous solution. List of excipients: Sodium hydroxide and water for injection. Therapeutic indications: For treatment of cerebrovascular disorders. Especially in the following indications: Senile dementia of Alzheimer's type. Vascular dementia. Stroke. Craniocerebral trauma (commotio and contusio). Contraindications: Hypersensitivity to one of the components of the drug, epilepsy, severe renal impairment. Marketing Authorisation Holder: EVER Neuro Pharma GmbH, A-4866 Unterach. Only available on prescription and in pharmacies. More information about pharmaceutical form, posology and method of administration, special warnings and precautions for use, interaction with other medicinal products and other forms of interaction, fertility, pregnancy and lactation, effects on ability to drive and use machines, undesirable effects, overdose, pharmacodynamics properties, pharmacokinetic properties, preclinical safety data, incompatibilities, shelf life, special precautions for storage, nature and contents of the container and special precautions for disposal is available in the summary of product characteristics.

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