

November 14, 2023



Reconnecting Neurons. Empowering for Life. Webinar EVER Pharma (November 14, 2023)

Multidisciplinary Neurotrauma treatment – Panel Discussion about clinical reality and implementation strategies



SPEAKERS



Johannes Thome

Clinic and Policlinic for Psychiatry and Psychotherapy, University of Rostock, Germany



Katarzyna Kotfis

Department of Anaesthesiology, Intensive Therapy and Pain Management, Pomeranian Medical University in Szczecin, Poland



Peter Lackner

Head of Department of Neurology, Clinic Floridsdorf, Vienna, Austria



Andriy Huk

AMN Steering Committee member in Ukraine, Romodanov Institute of Neurosurgery, Kyiv, Ukraine



Katrin Rauen

Head Physician for Neurorehabilitation, Psychiatry, Psychotherapy & Psychosomatics, Neurological Rehabilitation Center Godeshöhe, Bonn, Germany

Webinar EVER Pharma (November 14, 2023)

Multidisciplinary Neurotrauma treatment – Panel Discussion about clinical reality and implementation strategies

INTRODUCTION

This webinar provided a comprehensive overview related to TBI treatment and rehabilitation, including challenges and unmet needs from clinical practice. It highlighted the complexity of TBI as a medical condition and the necessity for a multifaceted approach in its treatment and long-term management.

Prof. Johannes Thome, a psychiatrist from Rostock, Germany, led the discussion on the current barriers that limit the implementation of optimal therapy, focusing on possible solutions to overcome them. The panelists were **Dr. Katarzyna Kotfis**, anaesthiologist from Poland, **Dr. Peter Lackner**, neurologist from Austria, **Dr. Andrij Huk**, neurosurgeon from Ukraine and **Dr. Katrin Rauen**, physician for neurorehabilitation from Germany.



A psychiatrist's perspective

Johannes Thome

Prof. Thome began his presentation with an overview of psychiatric complications following TBI, which depend on several factors such as the severity and type of injury. The main problems are related to depression, which is difficult to diagnose, and the consequences of a lack of structured TBI aftercare. Cognitive complications are another common outcome of TBI. The use of objective scales to assess cognitive function is therefore recommended. All clinicians involved in the care of TBI patients are encouraged to use and recommend the use of such scales. One of the most widely used scales is the Montreal Cognitive Assessment (MoCA). This is a simple and effective screening tool for assessing different cognitive domains such as orientation, memory, attention and language.

An anesthesiologist's perspective

Katarzyna Kotfis

Dr. Kotfis focused her presentation on the characteristics of delirium after TBI and important issues in post-operative delirium.

Delirium affects between 46% and 69% of patients and is manifested by a variety of early symptoms such as inattention, which can be identified by validated assessments such as the confusion assessment method (CAM).

- Common early cognitive dysfunction.
- For patients hospitalized for TBI each year in the first week of hospitalization the incidence of delirium is 46.3–69.4% [1,2].
- Delirium is an acute disturbance of consciousness and cognition.
- Cardinal features of delirium: a rapid onset or fluctuating course, inattention, disturbance in the sleep-wake cycle, disorientation,

altered level of consciousness, disorganized thoughts with perceptual disturbances, and incoherent speech.

Dr. Kotfis also showed study data on the relationship between delirium and the location and size of the brain lesion. As anaesthesia and surgery also have an impact on short and long term cognitive performance, cognitive recovery after surgery is often a particular challenge for the patients themselves, but also for their families.

In the final part of her presentation, Dr. Kotfis pointed out that patients with post-operative delirium have worse outcomes, such as increased mortality, longer hospital stay, increased nursing care and costs. It will therefore be important to explore pharmacological agents that can be safely used in the ICU to reduce the symptoms of delirium or prevent its consequences. She emphasized that Cerebrolysin could be one such agent.

^{1.} Nakase-Richardson R, Yablon SA, Sherer M (2007) Prospective comparison of acute confusion severity with duration of posttraumatic amnesia in predicting employment outcome after traumatic brain injury. J Neurol Neurosurg Psychiatry 78:872–876 2. Maneewong J, Maneeton B, Maneeton N, Vaniyapong T, Traisathit P, Sricharoen N, Srisurapanont M (2017) Delirium after a traumatic brain injury: predictors and symptom patterns. Neuropsychiatr Dis Treat 13:459–465

A neurologist's perspective

Peter Lackner

Dr. Lackner began with the statement 'Neurotrauma treatment is teamwork' and stressed that there is still much room for improvement. Treatment of TBI is a major socio-economic burden, especially in low- and middle-income countries. He emphasized that neurologists should be involved early in the recovery chain, right after life-saving treatments have been initiated. Mild TBI (approximately 80-85% of patients) is an underestimated challenge, as many patients also develop cognitive and other long-term sequelae that severely impact their quality of life. Awareness of post-concussion symptoms such as headaches, fatigue, mood swings and anxiety, which can last for months and years, needs to be increased so that more patients receive or seek appropriate treatment for these symptoms.

A neurosurgeon's perspective

Andrij Huk

Dr. Andrij Huk provided a very practical perspective by presenting his clinical experiences of using Cerebrolysin in patients with acute penetrating head trauma.

He continued his presentation by presenting the results of a case series documented in patients rehabilitated at the Institute of Neurosurgery following a brain contusion (acubarotrauma). These patients showed a dramatic reduction in the consequences of severe brain contusion, such as:

- Behavior: Apathy; frequent mood change; change of personality; impulsiveness; anxiety; depression; inflammation; slowing of the reaction in response to a stimulus.
- Cognition: Communication problem; difficulties with processing the received information; repeating patterns.
- Neurological-somatic status: Disorder of the sleep process; cephalgia; disturbance of consciousness; convulsive syndrome; violation of motor functions; violation of digestive function; increased fatigue; violation of coordination.

Although specific and detailed evaluations were not presented, he emphasized that the clinical improvements were very obvious to the patients themselves and to the healthcare professionals.

A rehabilitation specialist's perspective

Katrin Rauen

The last speaker was Prof. Kathrin Rauen, who presented recent data on unmet treatment needs six months after mild trauma.

While most TBI patients have a good quality of life for up to 10 years after the injury, there is evidence that neuropsychiatric complaints increase with frontal lobe trauma. It will be important to use good screening tools that focus on health-related quality of life issues. Prof. Rauen emphasized the need for measures to promote multidisciplinary neurotrauma care in general and rehabilitation in particular, taking into account cognitive and psychiatric problems.

Discussion

- The overarching problem in the treatment of TBI patients is still the long-term care of these patients. This problem can only be solved if different disciplines treat and support patients over a longer period of time.
- It is important to raise awareness that cognitive and psychiatric problems occur within ten years in the majority of moderate and severe TBI patients and even in more than 30 percent of mild TBI patients.
- The development of a multidisciplinary approach to the treatment of TBI and its implementation worldwide is therefore of central importance, and treatment with Cerebrolysin is one way of providing relief and recovery for TBI patients.



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.

Copyright © 2023 by EVER Neuro Pharma GmbH, Oberburgau 3, 4866 Unterach, Austria. All rights reserved. No part of this brochure may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without permission in writing from the publisher. Cerebrolysin is a registered trademark of EVER Neuro Pharma GmbH, 4866 Unterach, Austria

EVER Neuro Pharma GmbH Oberburgau 3 4866 Unterach Austria www.everpharma.com

www.cerebrolysin.com