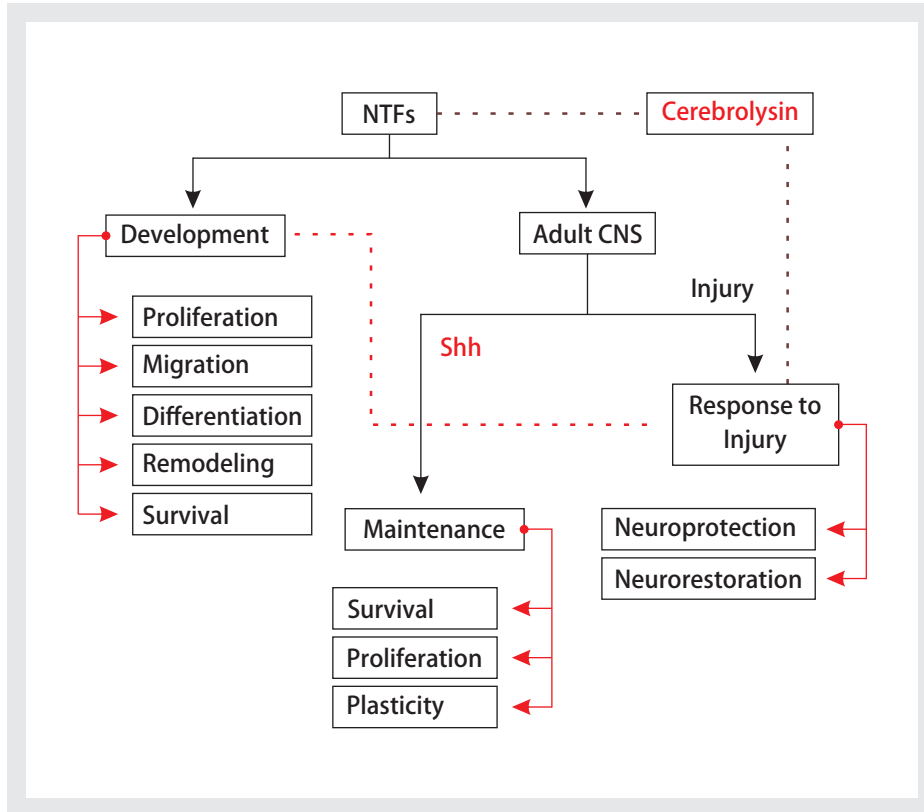


THE CORE CYTOPROTECTANT

CEREHENZ

Cerebroprotein Hydrolysate for injection 60 mg Injection

Role of Cerebrolysin in therapies for acute brain injuries



NTFs:

Neurotrophic factors play a key role in the regulation of nervous system functions.

Development:

NTFs control process of CNS development processes : proliferation of cells, migration of cells to their final destination, differentiation of precursor cells into mature, functional cells (neurons, astrocytes, oligodendrocytes, etc.), remodeling of growing CNS components and regulation of apoptosis (programmed cell death) that under lies this processes.

Adult CNS:

NTFs regulate processes necessary for maintaining the structure and functions of the mature CNS : regulating apoptosis (suppressing defective and protective healthy nervous tissue), maintaining ongoing processes of regeneration (proliferation, migration, differentiation), supporting processes of plasticity (enabling the nervous system to optimally adjust to a changing environment)

Response to injury :

NTFs are a key element in natural recovery from injuries/diseases of the CNS; the regulation of apoptosis and the stimulation of neuroregeneration result in endogenous neuroprotective and neurorestorative activities; the recovery processes utilize mechanisms active during development of the CNS.

Shh :

Sonic hedgehog is a key signaling pathway controlling the expression of developmental genes which underpins recovery from an injury.

Cerebrolysin :

It acts like NTFs and is capable of stimulating natural recovery processes through the shh signaling pathway.

CLINICAL EVIDENCE :

1. "The use of cerebroprotein hydrolysate in dementia: A case series of 25 cases seen in a tertiary general hospital"

Journal of Geriatric Mental Health, Jul-Dec-2014

- 25 patients administered 20 doses of cerebroprotein hydrolysate intravenously at a dose of 60 mg in 250 ml normal saline over 1-2 h after a test dose on 20 consecutive days.
- All patients were aged above 65 years with the age range being 68 - 89 years.
- A majority of patients had mixed dementia (Alzheimer's + vascular).
- 7 patients had pure vascular dementia while 6 had Alzheimer's dementia.

Result :

- The mean Adenbrook's Cognitive Examination-Revised (ACER) scores at the start of therapy was 14.92 (SD = 4.04; range 9-22) and at the end of the course of therapy was 35.32 (SD = 5.46; range 22-43)
- The mean Mini Mental Status Examination (MMSE) scores at the start of therapy was 11.48 (SD = 1.36; range 10-14) and at the end of therapy was 18.84 (SD = 1.4; range 16-21)
- The changes in ACER scores ($t = 26.43$, $df = 23$, $P < 0.0001$) and MMSE ($t = 25.86$, $df = 23$, $P = 0.0001$) were statistically significant.

Conclusion :

- Cerebroprotein is a useful pharmacological option in the management of dementia.

2. "Effect of Cerebroprotein Hydrolysate in management of Mild And Moderate Traumatic Brain Injury - An Institutional Study"

IOSR Journal of Dental and Medical Sciences, Sep 2017

Aim :

- To determine the beneficiary effects of cerebroprotein hydrolysate and its clinical outcome in management of traumatic brain injuries.

Material and Methods :

- Study comprising of 300 patients admitted in Department of Neurosurgery, Government Medical College and Hospital, Guntur, Andhra Pradesh for a period of 2 years (March 2015 - march 2017).

Results :

- 300 patients were included in this study in a period of 2 years where in 210 were Male and 90 were Female.
- Patients were randomly divided into 2 groups.
- Group A and Group B with 150 patients in each group.
- Group A were treated with cerebroprotein hydrolysate after head injury.
- Group B patients did not receive the drug instead they were treated routinely.
- GCS in Group A patients at the time of admission for 70 patients was mild Traumatic brain injury and 80 patients with moderate TBI.
- Where as in Group B 80 patients had mild traumatic brain injury and 70 had moderate traumatic brain injury.
- On assessing patients 3 week post cerebroprotein infusion, amongst Group A, 110 were with mild and 40 were with moderate category of traumatic brain injury. Whereas 90 were with mild and 60 were with moderate category of traumatic injury in Group B.

Conclusion :

- Cerebroprotein hydrolysate infusion has a beneficial effect in managing cases of acute traumatic brain injury and is safe and well tolerated by the patients.

CEREHENZ

Cerebroprotein Hydrolysate for injection 60 mg Injection

DESCRIPTION :

- CEREHENZ is a white or pale yellow sterile lyophilized powder or masses, freely soluble in water. It comprises Cerebroprotein hydrolysate consisting of 16 amino acids and polypeptides from animal brain tissues hydrolyzed by enzymes. This preparation does not contain any protein, lipid and other possible antigen components, which may induce hypersensitivity.

PHARMACOLOGY :

Cerebroprotein Hydrolysate acts by -

- Regulation and improvement of the neuronal metabolism.
- Modulation of the synaptic plasticity.
- Promoting neuronal differentiation and protection against ischemic and neurotoxin lesion.
- Reducing excitotoxic damage.
- Blocking over activation of calcium dependent proteases.
- Scavenging free oxygen radicals.

INDICATIONS :

- Amelioration of cranial injury
- Cerebrovascular pathological sequelae
- Aprosaxia in dementia

BENEFITS :

- It helps faster and superior nerve repair and growth than other neurotrophic agents.
- Neurotrophic activity can be detected within 24 hours after a single dose.
- Early intervention with Cerebroprotein Hydrolysate reduces blood-brain and blood-cerebrospinal fluid barrier permeability changes, attenuates brain pathology and brain edema.
- It is an effective tool for improving levels of activities of daily living in patients with various neurological disorders and decreasing their dependence on caregivers.
- Safe and effective first choice treatment for many neurological disorders, ranging from stroke to Alzheimer's disease.

ADMINISTRATION AND DOSAGE :

- The standard dosage of CEREHENZ is 60-180 mg (calculated by total nitrogen). For preparing infusion, first required dose of CEREHENZ should be dissolved in 5-15 ml of water for injection, which can be further diluted in 250ml of normal saline.
- Recommended treatment is 10 to 20 days of continuous daily usage of required dosage of Cerebroprotein hydrolysate based on patient's age and illness.

STORAGE :

- Store in a cool and dry place in tightly closed containers, protect from light.

La Renon Healthcare Pvt. Ltd.

207-208 Iscon Elegance | Circle P | Prahlad Nagar Cross Roads | S.G. Highway Ahmedabad-380015, Gujarat, India.
Phone : + 91-79-6616 8998 | Fax : +91-6616 8998 | E-mail : info@larenon.com | Web : www.larenon.com

