PULSUS
WWW.PULSUS.COM

4th International Conference on

Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

Posters

PULSUS
WWW.PULSUS.COM

Mohsen Abbasi-Kangevari et al., Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

Knowledge about risk factors of stroke among patients

Mohsen Abbasi-Kangevari and **Ali-Asghar Kolahi**
Shahid Beheshti University of Medical Sciences, Iran

Proper knowledge about stroke risk factors could enhance patients' attitudes and practices regarding lifestyle-related risk factors of stroke. Although unchanged unhealthy lifestyle could put patients at a greater risk of recurrent stroke, few studies have been found to assess the knowledge of patients with stroke about its risk factors in Iran. Therefore, the objective of this study was to assess the knowledge of stroke risk factors among patients with stroke in a teaching hospital in Tehran. In the period of May to July 2016, patients diagnosed with stroke admitted to the neurology ward of Loghman-Hakim hospital participated in the study. Data were collected through face to face interviews, held by trained general practitioners. Responses of 372 patients were analyzed. The level of knowledge of patients about risk factors of stroke was low. Almost half of the patients were not able to name a single risk factor of stroke, and only 13% could name three stroke risk factors or more. The most mentioned risk factors were stress (52.2%), anxiety (41.8%), and hypertension (33.4%). The level of knowledge of patients who were 60 years old or more was significantly higher compared to those aged less than 60 years. In addition, the level of knowledge of patients with high school diploma or higher education was higher compared to those with lower education. It is suggested that education programs be established in hospitals to improve patients' level of knowledge about stroke risk factors.

Biography

Mohsen Abbasi-Kangevari is a fourth-year medical studet at Shahid Beheshti University of Medical Sciences. He has published one article, has one article in press and two articles under review. He has also co-translated the fifth edition of Immunology & Serology in Laboratory Medicine into Perisan. His main field of interest in research is neroscience and public health. He speaks three languages, including Persian, English, and German.

mohsen.abbasi@sbmu.ac.ir

Notes:

PULSUS
WWW.PULSUS.COM

Md Mahbubur Rahman et al., Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

4th International Conference on

Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

Coenzyme Q10 Ameliorates Hyperlipidemia Induced Brain Oxidative Stress and Inflammation

Md Mahbubur Rahman, Md Abdullah Potol , Sourov Roy, Saiky Jahan Elona, Abir Hossain, Rifat Sultana, Mahabub Alam, Zaki Forhad Habib, Rasiqh Wadud A F M Towheedur Rahman
North South University, Bangladesh

Oxidative stress is a common deneomentor in many diseases processes including hyperlipidemia. Persistent oxidative stress may result in inflammation which eventully lead to other diseses including neurodegenation. Thus optimum tritration of oxidative stress is essential for proper brain function. Coenzyme Q10 is a powerfull antioxidant and has been reported as a scanvenger of oxidative stress. Hyperlipidemia on the other hand aggravate the outcome in neurodegenerative disorders by enhancing oxidative stress. Therefore, in our current study, we evaluated the effect of coenzyme Q10 in a setting of hyperlipidemia.Hyperlipidemia was induced by a single intraperitoneal injection of Tyloxapol into eight weeks old mice. Twenty four hours after the injection, mice were sacrificed and plasma were collected for the measurement of biochemical parameters. The treatment group received Coenzyme Q10 at a dose of 150 mg /kg BW. We noticed that plasma triglyceride and Cholesterol level was significantly higher in mice with hyperlipidemia compared to the control group. Coenzyme Q10 treatment reduced plasma cholesterol and triglyceride level significantly which was comparable to the standard treatment Rosuvastatin. Lipid peroxidation in plasma was significantly higher in mice with hyperlipidemia which was normalized upon coenzyme Q10 treatment. However the lipid peroxidation in brain was unachaned in mice of different groups. We noticed significantly higher concentration of NO, marker of oxidative stress, in brain and plasma. Coenzyme Q10 treatment reduced the level of NO in brain and plasma significantly.Coenzyme Q10 reduces hyperlipidemia induced oxidative stresss and inflammation in brain and plasma most likely by enhancing antioxidative defense mechanism.

Biography

Md Mahbubur Rahman is a teaching professional with progressive experience in research. He has demonstrated high level of ingenuity in research in the field of Neuropharmacology. In 2013, Dr. Rahman received his doctoral degree from the Heidelberg University, Germany. He is an expert in animal model of stroke. He completed MS in Pharmaceutical Sciences and Bachelor of Pharmacy from Jahangirnagar University, Dhaka in 2008 and 2006 respectively. Currently, he is working as an Assistant Professor and focusing his research on developing an animal model in an attempt to figure out the impact of food habits on neurodegenerative disorders.

rahman.mahbubur@northsouth.edu

Notes:

PULSUS
WWW.PULSUS.COM

Mishaal Alkhaldi et al., Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

4th International Conference on
Neurodegenerative Disorders and Stroke
July 05-06, 2017 Frankfurt, Germany

MS stands for Mimicking Stroke

Mishaal Alkhaldi, Farah Al Eisa, Abdulnasser Aboud, Eman Nasim and **Khaled Darawil**
King Fahad Specialist Hospital Dammam, Saudi Arabia

Multiple sclerosis (MS) is the most common inflammatory demyelinating disease of the central nervous system; it is known to cause scarring in multifocal areas. Although MS may have certain clinical features, it may come with many atypical forms which is a reason for MS diagnosis challenge as this disease has been known to be presented with paraparesis or monoparesis, but rarely with hemiplegia. A hemiplegic presentation of MS can make it very puzzling to diagnose as the early warning signs of stroke may resemble this Pseudo stroke hemiplegic type MS. However, with the development of diagnosing equipment like Magnetic Resonance Imaging (MRI) or CT scan, MS diagnosis can be easier confirmed. Fortunately, this bizarre form of MS had a complete and quick recovery under the rehabilitation ward for a short time i.e. month; receiving Pulse therapy, plasmapheresis along with intensive rehabilitation services which had significantly assisted in the obtained full recovery. In this case report, a description of the rare MS presentation, used methods for diagnosis, the rehabilitation plan managed for this patient and how far it affected the patient's functional status upon discharge after four weeks of admission will be discussed.

Biography

Mishaal Alkhaldi has completed her MSc in Advanced Physiotherapy at University of Salford, United Kingdom. She is working as a Senior Rehabilitation Physical Therapist at King Fahad Specialist Hospital- Dammam, Saudi Arabia since 2015. She has published one paper in an open access journal.

Mishaal.Alkhaldi1@hotmail.co.uk

Notes:

PULSUS
WWW.PULSUS.COM

Md Mahbubur Rahman et al., Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

Rice bran oil improves behavioral disorder in AlCl3 induced dementia

Md Mahbubur Rahman, Waeza Tahsin Chowdhury, Md Abdullah Potol, Saba Reza, Mahmuda Arefin Mumu, Mahabub Alam, Abdirahman Adam Ibrahim Nur, Afrida Fyroz, Sharmin Sultana, Asha Akter and **Monjur Murshid**
North South University, Bangladesh

The prevalence of Alzheimer's diseases is quite high in developed countries as well as in low income countries. Dementia is one of the major phenotypes observed in Alzheimer's disease. The treatment options for Alzheimer's disease and dementia are not devoid of flaws and drugs with optimum effects are still to be discovered. Natural products on the other hand are a good source of lead compounds. Here, we investigated the effect of rice bran oil (RBO) on a mouse model of dementia. Eight to ten weeks old Swiss albino mice were injected with low dose $AlCl_3$ for two weeks to induce mild dementia. Morris water maze (MWM) and radial arm maze (RAM) test were performed to evaluate the memory function. We also measured oxidative stress in brain. In the RAM test, the number of total error increased substantially after treatment with $AlCl_3$. However, when we treat mice with RBO, a significant reduction was observed. In MWM test, latency to the target increases significantly after $AlCl_3$ injection which was reversed upon treatment with RBO. In open field test, we noticed that $AlCl_3$ treated mice travelled longer distance than the one with RBO. Lipid peroxidation was significantly higher in the hippocampus of disease group which was reduced in RBO group. Oxidative stress marker NO was also significantly reduced with RBO treatment compared to the disease group. Therefore, we conclude that rice bran oil improves spatial memory function associated with reduced oxidative stress and lipid peroxidation.

Biography

Md Mahbubur Rahman is a teaching professional with progressive experience in research. He has demonstrated high level of ingenuity in research in the field of Neuropharmacology. In 2013, Dr. Rahman received his doctoral degree from the Heidelberg University, Germany. He is an expert in animal model of stroke. He completed MS in Pharmaceutical Sciences and Bachelor of Pharmacy from Jahangirnagar University, Dhaka in 2008 and 2006 respectively. Currently, he is working as an Assistant Professor and focusing his research on developing an animal model in an attempt to figure out the impact of food habits on neurodegenerative disorders.

rahman.mahbubur@northsouth.edu

Notes:

PULSUS
WWW.PULSUS.COM

Duray M et al., Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

The effects of hemiplegic shoulder pain on upper extremity motor function and proprioception self-efficacy

Duray M, Baskan E and **Dengiz A**
Pamukkale University, Turkey

Aim: The aim of this study was to investigate the effects of hemiplegic shoulder pain on upper extremity motor function and proprioception.

Methods: 122 hemiplegic patients treated in the physical therapy unit at Pamukkale University Hospital were included in this study. The patients' shoulder pain during activity was evaluated by Visual Analog Scale. According to pain scores, cases were divided into two groups as group with pain (group one, n=76) and group without pain (group two, n=46). Upper extremity motor function level and proprioception were assessed by using Fugl Meyer Motor Function Scale and Laser Pointer Assisted Angle Reproduction Test, respectively. Proprioception test was repeated three times for the angles of 45°, 60° and 90° of shoulder flexion. The mean of these scores were used for analyses.

Results: The average age were calculated as 61.54±16.33 for group one and as 55.93±16.58 for group two. The demographic characteristics of the groups except marital status were similar. Upper extremity motor function (p=0.005) of group one were found significantly worse than group two. When groups were compared in terms of hemiplegic shoulder's proprioceptive sense, it was found that group one had more impaired shoulder position sense (p<0.05). While the maximum deviation was seen at the angle of 45° of shoulder flexion (P=0.001), the minimum deviation was seen at the angle of 90° of shoulder flexion (P=0.010).

Discussion: In our study, it was concluded that hemiplegic shoulder pain after post-stroke is a main determinator of upper extremity function and proprioception sense at different angles.

Biography

Duray M has completed his PhD at the age of 25 years from Pamukkale University. He is also study of Master Thesis Subject: The relationship between physical fitness and falling risk and fear of falling in community-dwelling elderly people with different physical activity levels. He has published more than 3 papers in reputed journals. Present time he is Research Assistant Pamukkale University, School of Physical Therapy and Rehabilitation Kinikli, Denizli/Turkey

mduray@pau.edu.tr

Notes:

PULSUS
WWW.PULSUS.COM

Dengiz A et al., Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

4th International Conference on

Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

Stroke syndrome, which is caused by Takayasu's arteritis: Case report

Dengiz A, Baskan E and **Duray M**
Pamukkale University, Turkey

Takayasu's arteritis (TA) is a chronic inflammatory disease of unknown etiology that can affect the aorta and its branches. TA can be caused by transient ischemic attacks or stroke. The aim of the present case report was to investigate the effects of a physiotherapy program on stroke patient with Takayasu's arteritis. This case study included a 54 year-old male patient (82 kg, 175 cm) diagnosed with stroke. Physiotherapy included a total of 12 sessions, three sessions a week for four weeks. Following the physiotherapy training, the patient was assigned to a home therapy program. Before and after treatment shoulder pain, balance, walking distance, depression score, spasticity, mobility and fatigue were assested by Visual Analog Scale, Berg balance test, Six Minute Walking Test, Beck Depression Inventory, Modified Ashworth Scale, Rivermead Mobility Index and Visual Analog Scale, respectively. It seems that shoulder pain decreased three points, balance improved, walking distance increased 27 m, depression score decreased four points, spasticity of gastrocnemius muscle decreased one point, mobility improved, and fatigue decreased four points. Physiotherapy training may be an effective treatment method in patients with stroke syndrome, which is caused by TA. However, further studies with larger sample size are warranted.

Biography

Dengiz A, has completed his PhD at the age of 25 years from Pamukkale University School of Physical Therapy and Rehabilitation Kinikli, Denizli/Turkey, and now he is a Research Assistant at Pamukkale University .He has published more than 5 papers in reputed journals.

aziz_denkmiyiz@hotmail.com

Notes:

PULSUS
WWW.PULSUS.COM

4th International Conference on

Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

Accepted Abstracts

PULSUS
WWW.PULSUS.COM

Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

Riluzole ameliorates learning and memory deficits in Ab25-35- induced rat model of Alzheimer's disease and is independent of cholinoceptor activation

Zahra Mokhtari
Tehran University of Medical Sciences, Iran

Alzheimer's disease (AD) is a major global public health concern and social care problem that is associated with learning, memory, and cognitive deficits. Riluzole is a glutamate modulator which has shown to improve memory performance in aged rats and may be of benefit in Alzheimer's disease. In the present study, its beneficial effect on attenuation of learning and memory deficits in Ab25-35-induced rat model of AD was assessed. Riluzole administration at a dose of 10 mg/kg/day

p.o. improved spatial memory in Morris water maze and retention and recall in passive avoidance task and its protective effect was not neutralized following intracerebroventricular microinjection of muscarinic or nicotinic receptor antagonists. Further biochemical analysis showed that riluzole pretreatment of intrahippocampal Abmicroinjected rats is able to attenuate hippocampal AChE activity and lower some oxidative stress markers, i.e. MDA and nitrite, with no significant change of the defensive enzyme catalase. Furthermore, riluzole prevented hippocampal CA1 neuronal loss and reduced 3-nitrotyrosine immunoreactivity. It is concluded that riluzole could exert a protective effect against memory decline induced by intrahippocampal Ab25-35 through anti-oxidative, anti-cholinesterase, and neuroprotective potential and its beneficial effect is possibly independent of cholinoceptor activation.

mokhtari9002@yahoo.com

Notes:

PULSUS
WWW.PULSUS.COM

Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

4th International Conference on

Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

The 10,000 fold effect of retrograde neurotransmission-A new concept for cerebral palsy revival: Use of nitric oxide donors (intrathecal sodium nitroprusside and oral tadalafil)

Vinod Kumar
Sahara India Medical Institute, India

Introduction: Nitric-oxide-donors (NODs) [intrathecal sodium nitroprusside (IT SNP)] and oral tadalafil is studied in cerebral palsy (CP). This work proposes three mechanisms for cerebral palsy cases, which are interrelated for swift physiological recovery. A) Retrograde neurotransmission: Normal excitatory impulse - at the synaptic level, glutamate activates NMDA receptors, with nitric oxide synthase (NOS) on the postsynaptic membrane, for further propagation by the calcium-calmodulin complex. Nitric oxide (NO, produced by NOS) travels backward across the chemical synapse and binds the NO receptor at presynaptic neuron, regulating anterograde neurotransmission (ANT) via retrograde neurotransmission (RNT). Heme is the ligand-binding site of the NO receptor. Heme exhibits >10,000-fold higher affinity for NO than for oxygen (10,000-fold effect) and; pathological conditions -normal synaptic activity, including both ANT and RNT, is absent. NO donors release NO from NOS at the postsynaptic region generates an impulse, same as under normal conditions. B) Vasospasm: Perforators show vasospastic activity. NO vasodilates it via NO-cAMP pathway. C) Long-term-potentiation (Ltp): The NO–cGMP-pathway plays a role in LTP at many synapses throughout the CNS and at the neuromuscular junction for memory/learning.

Materials & Method: 60 random CP - 30 control without NOD or with 5% dextrose superfusion, and 30 patients (irrespective of etiology) comprised the NOD group in which ITSNP and oral tadalafil 0.2 mg per kg/bo/wt per alternate days for three months was given. The mean age for superfusion was 3.75 years. Pre- and post-NOD status was monitored by GMFM-66 with videography and MRI studies.

Results: The mean increase in GMFM-66 at post seven days was 37.29% and three months 37.15% in the NOD group, than control-group increase of 0% at seven days or three months.

Conclusion: NOD (ITSNP boosts up the recovery and oral tadalafil maintains the recovery) acts swiftly in the treatment of CP.

drvinodtewari@gmail.com

Notes:

PULSUS
WWW.PULSUS.COM

Neurosurg 2017, 2:1
DOI: 10.21767/2471-9633-C1-003

4th International Conference on

Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

No-ing" Primary Progressive Aphasia: Evolution of a Concept

Rhonna Shatz
University of Cincinnati, USA

This lecture is designed to provide an updated context for the classifications of primary progressive aphasias (PPA) and an expanded clinical rubric for differential diagnosis. Initially the neurodegenerative aphasias were defined based on the lesion localization classifications of cerebrovascular disease. However, the recognition that brain function is organized into three main networks--the default network, the frontal-executive network, and the salience network—allowed an expansion of the understanding of language organization and the ability to define the PPA according to network functions. Currently the classification system attempts to relate phenotypic presentations of the 3 differentiated PPAs according to regions of maximal atrophy or metabolic dysfunction focused on language alone. However, by viewing the concepts of brain network organziation on an evolutionary background of language development, there is a broader set of features that may more closely identify the phenotype and neuropathology of each syndrome. This lecture will present the concepts of PPA as part of an understanding of how language fits overall into the brain's overarching goal of enhancing survival, present a clinical rubric for defining the concept of fluent versus nonfluent PPA, integration of Tempini's classification system into an expanded evolutionary framework, and then discuss each syndrome individually, including videotaped examples of each subtype.

shatzra@ucmail.uc.edu

Notes: