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22. – 25. rujna 2010.

Zadar, Hrvatska

5. hrvatski kongres o Alzheimerovoj bolesti

s međunarodnim sudjelovanjem

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September, 22th – 25th, 2010

Zadar, Croatia

5th Croatian Congress on Alzheimer's Disease

with international participation

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5. HRVATSKI KONGRES O ALZHEIMEROVOJ BOLESTI
s međunarodnim sudjelovanjem

22. - 25. rujna 2010., Zadar, Hrvatska

5th CROATIAN CONGRESS ON ALZHEIMER'S DISEASE
with international participation

September 22 - 25, 2010, Zadar, Croatia

Organizatori / *Organizers*

Hrvatska udruga za Alzheimerovu bolest
Alzheimer Disease Societies Croatia

Hrvatsko društvo za kliničku psihijatriju HLZ-a
Croatian Society for Clinical Psychiatry, CMA

Hrvatsko društvo za neuroznanost HLZ-a
Croatian Society for Neuroscience, CMA

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Alzheimer's Disease International

Europska udruga za Alzheimerovu bolest
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TEME / *TOPICS*

1. ***Temeljna istraživanja i neuropatologija u AB***
   Basic research and neuropathology of AD

2. ***Rana dijagnostika AB***
   Early diagnostics of AD

3. ***Epidemiologija i čimbenici rizika AB***
   Epidemiology and risk factors for AD

4. ***Klinička istraživanja u AB***
   Clinical research in AD

5. ***Klinička obilježja AB i prikazi bolesnika***
   Clinical characteristics of AD and case reports

6. ***Farmakoterapija demencija***
   Pharmacotherapy of dementia

7. ***Ne-farmakološke intervencije u AB***
   Non-pharmacological interventions in AD

8. ***Skrb za oboljele od demencije***
   Care for people with dementia

9. ***Ne-Alzheimerove demencije***
   Non-Alzheimer dementia

10. ***Kvaliteta života u demenciji***
    Quality of life in dementia

11. ***Udruge za AB i skupine samopomoći***
    AD Associations and support groups

12. ***Ostale teme***
    Free topics

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Na preporuku uredničkog odbora, urednica časopisa Neurologia Croatica prihvaća objavljivanje sažetaka 5. hrvatskog kongresa o Alzheimerovoj bolesti s međunarodnim sudjelovanjem kao suplement časopisa.

Urednici ovog časopisa pregledali su i odobrili sažetke primljenih radova. Autori sažetaka odgovorni su za sadržajnu i jezičnu ispravnost svojih sažetaka.

Koordinirajući urednik odgovoran je za sveukupnu kvalitetu Suplementa.

The Editor-in-Chief of Neurologia Croatica, as advised by the Editorial Bord, has accepted publishing the abstracts of the 5th Croatian Congress on Alzheimer's Disease with international participation as a journal Supplement.

The editors of this Supplement have been commited to rewiew and accept the abstracts of submitted contributions. The abstract and its linguistic occuracy is the resposibility of the author.

The Supplement Coordinating Editor is responsibile of the overall quality of the Supplement.

Sanja Hajnšek

Glavna urednica
Editor-in-Chief

Sadržaj / Contents

5. HRVATSKI KONGRES O ALZHEIMEROVOJ BOLESTI s međunarodnim sudjelovanjem

5th CROATIAN CONGRESS ON ALZHEIMER'S DISEASE with international participation

SAŽECI POSTER PREZENTACIJA / *ABSTRACTS OF POSTER PRESENTATIONS*

UVOD / *INTRODUCTION*

Alzheimer Disease Societies Croatia (ADSC), as a main organizer, along with the support of the Croatian Society for Clinical Psychiatry, CMA and Croatian Society for Neuroscience is continuing to organize the 5th Croatian Congress on Alzheimer's Disease with international participation. This professional and scientific meeting will show the newest findings from the field of Alzheimer's disease (AD) and other dementias.

This time, again, we are going to begin the Congress with cultural happening – exhibition of drawings done by Zvonko Ozmec, person with dementia (PWD). These drawings were done by mr. Ozmec while he was undergoing art therapy in Day care centre, and interesting point is that he was never drawing pictures before developing AD.

During the working part of the Congress, we will try to highlight dementia as much as possible, so we are going to speak about AD and other dementias thru 11 topics. Namely, this time it will be possible to listen the lectures and view the posters from the following topics: 1. Basic research and neuropathology of AD; 2. Early diagnostics of AD; 3. Epidemiology and risk factors for AD; 4. Clinical research in AD; 5. Clinical characteristics of AD and case reports; 6. Pharmacotherapy of dementia; 7. Care for people with dementia; 8. Non-Alzheimer dementia; 9. Quality of life in dementia; 10. AD associations and support groups; 11. Free topics. Fifteen eminent invited speakers will cover many of the topics listed above, and we are more than happy to announce that plenary lecture at our Congress will be given by eminent expert Prof. Ezio Giacobini, from Geneva, Switzerland. Prof. Giacobini is an Adjunct Professor of Pharmacology, Psychiatry and Neurology at Southern Illinois School of Medicine Springfield, Illinois, USA, and his major research interest is in the pre-clinical and clinical development of drug therapy for AD.

Throughout this meeting participants will, on daily basis, have chance to hear about most recent findings as well from basic as from clinical field and also about care for PWD. We believe that this Congress, which is encouraging the holistic approach to AD, will give the opportunity and space to all professionals and interested persons from various professions to share the information and experience. Since we did not want parallel lectures, a large number of submitted papers will be presented in poster form, which will remain mounted from opening till closing of the Congress, and the three best posters (from basic, clinical and social field of AD) will be awarded.

We are proud to announce that this jubilee Croatian Congress hit the record in connection with active participants, and due to this we are sure that the important conclusions will be given, which will have substantially impact on the improvement of care and overall treatment for PWD in Croatia, as well as for quality of life of their carers. All mentioned above, will give strength to our volunteers in ADSC to continue on this important and demanding task.

Assist. Professor Ninoslav Mimica, MD, DSc, Primarius

President of Alzheimer Disease Societies Croatia

President of the Organizing Committee of
5th Croatian Congress on Alzheimer's Disease
with international participation

DOBRODOŠLICA / *WELCOME*

Dear colleagues and friends,

it is my great pleasure and honour to address this fifth Croatian congress on Alzheimer's disease with international participation. I am delighted to see so many distinguished scientists and clinicians from across the world participating in this meeting to share their views and experience.

As to the current state of affairs in the field it can be said that it looks promising due to the fact that two complementary modalities, biomarkers in cerebrospinal fluid and magnetic resonance imaging have been improved to a level that very early diagnosis of Alzheimer's disease became possible. In the near future, we can expect even more precise determination of the primary cause of dementia using molecular analysis of cerebrospinal fluid and imaging of brain structure and activity. It can also be presumed that, besides the currently registered drugs for early and moderate/late Alzheimer's disease, new drugs will be developed to act more effectively on the key pathophysiological events of the disease.

The program of the forthcoming fifth meeting focuses on many of these exciting new advances on Alzheimer's disease, including functional molecular profiling, cerebrospinal fluid and other peripheral biomarkers, the importance of non-cognitive symptoms, brain insulin receptor signaling and state-of-the-art neuroimaging methods. We will also hear about the newest research findings in many closely related fields, covering topics from mouse models of Alzheimer's disease to other dementing conditions such as frontotemporal dementia, tauopathies and Lewy body disease.

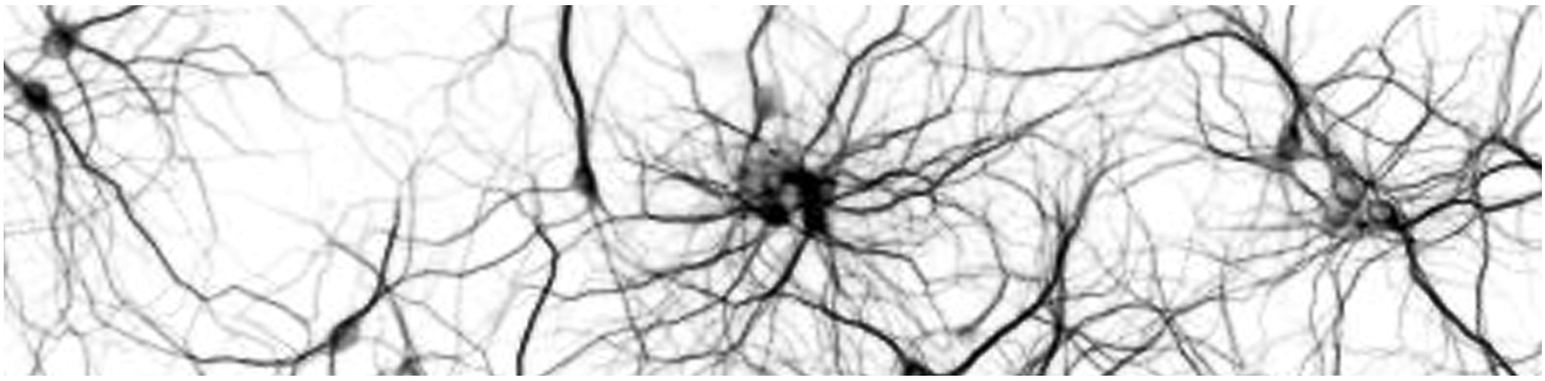
On behalf of the Scientific Committee of the 5th Croatian congress on Alzheimer's Disease I warmly welcome all of you to Zadar to enjoy this stimulating meeting, which will also provide you an opportunity to experience the Croatian late summer on the beautiful Adriatic coast. I thank you all for your contribution.

With compliments,

Assoc. Professor Goran Šimić, M.D., Ph.D.

Vice-President of Alzheimer Disease Societies Croatia

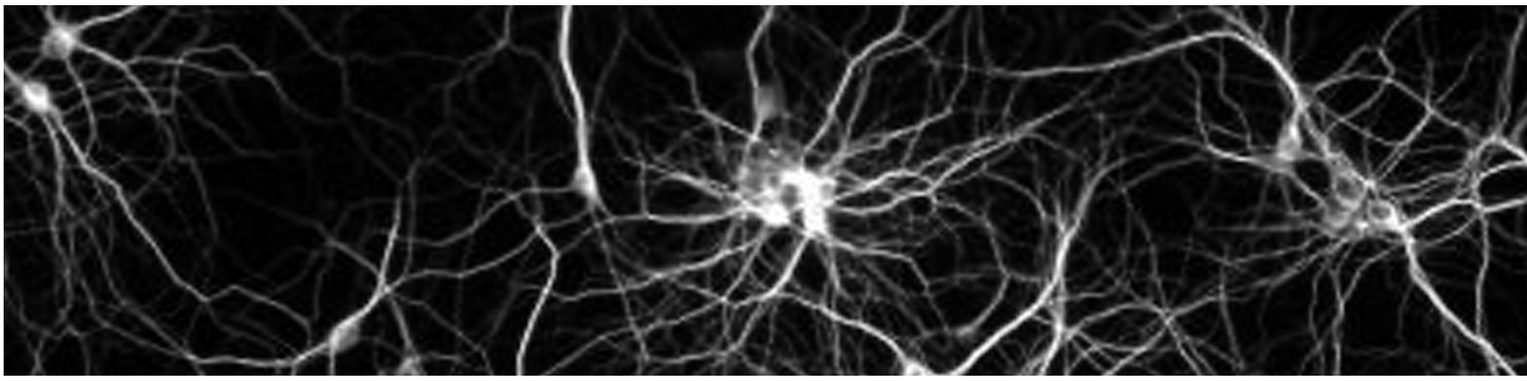
President of the Scientific Committee of
5th Croatian Congress on Alzheimer's Disease with international participation
Translational Neuroscience, Editor-in-Chief and Managing Editor



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Temeljna istraživanja i neuropatologija u AB
Basic research and neuropathology of AD

OP-1(1-5)



Basic research and neuropathology of AD (OP – 1 / 1)

IDENTIFYING BIOMARKERS IN FRONTOTEMPORAL DEMENTIA AND AMYOTROPHIC LATERAL SCLEROSIS

LISČIĆ RM

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Frontotemporal dementia (FTD) is the second most common cause of presenile dementia after Alzheimer's disease. Amyotrophic lateral sclerosis (ALS) is the most common adult-onset fatal motor neuron disease. Both, FTD and ALS are neurodegenerative disorders pathologically characterized by lesions composed of disease-specific misfolded proteins. Their clinical syndromes often have overlapping features such as impaired cognition demonstrated in about 50% of ALS patients, making ante mortem prediction of pathology challenging. Therefore, sensitive and reliable biomarkers that reflect the underlying disease process are urgently needed, and are a prerequisite for an accurate diagnosis and the development of novel disease-modifying therapeutic strategies.

The neuropathology associated with most FTD and/or ALS is characterized by abnormal cellular aggregation of transactive response DNA-binding 43 protein (TDP-43), fused in sarcoma/translated in liposarcoma (FUS/TLS), tau protein or unindentified ubiquitinated protein (atypical FTLD-U). Most cases of ALS are sporadic, but about 10% are familial ALS. Genes known to cause familial ALS (FALS) are superoxide dismutase 1 (SOD1), ANG encoding angiogenin, TARDP encoding TDP-43, FUS/TLS, and optineurin (OPTN). However, these genetic defects occur in only about 20-30% of cases of FALS, and most genes causing FALS are still unknown. A pathogenic role of TDP-43 and FUS is indicated in possibly all types of ALS, except for SOD-1 linked ALS, which may have a pathogenic pathway distinct from other types of ALS. Up to 40% of FTD cases are familial, resulting from null mutations in GRN gene encoding progranulin, and mutations in MAPT gene encoding tau protein. Several missense mutations have been identified in GRN but yet to be determined as pathogenic. Therefore, TDP-43 and FUS-proteinopaties are possibly novel targets for the development of therapeutics in this spectrum of diseases.

Basic research and neuropathology of AD (OP — 1 / 2)

GENETIC ANALYSIS OF THE BRAIN DERIVED NEUROTROPHIC FACTOR VAL66MET POLYMORPHISM IN ALZHEIMER'S DISEASE

PIVAC N[1], Nikolac M[1], Nedić G[1], Mustapić M[1], Borovečki F[2,3], Presečki P[4], Hajnšek S[2], Mimica N[5], Mück-Šeler D[1]

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Aims

Alzheimer's disease (AD) is prevalent, complex and progressive neurodegenerative disorder, characterized by heavy memory losses, losses of speech, reductions of the cognitive function, altered behaviour, and inabilities of decision making. AD is the most frequent cause of dementia. The genetic risk factors for AD include mutations of genes for amyloid precursor protein, presenilins, apolipoprotein E gene, but also for brain derived neurotrophic factor (BDNF). BDNF is a neurotrophin that regulates neuronal development and function, cognition, learning, mood, behavior, and stress response. Since BDNF affects cholinergic, dopaminergic, and serotonergic neurotransmission, it has a role in the etiopathogenesis of different neuropsychiatric disorders including AD. Cognitive decline is associated with reduced BDNF levels. The BDNF gene contains a common, functional polymorphism, Val66Met that produces the substitution of valine (Val) to methionine (Met). It affects intracellular trafficking and activity-dependent secretion of BDNF. The Met allele is associated with reduced delayed episodic memory, poor working memory performance and impaired hippocampal function. BDNF Val66Met polymorphism was proposed, and opposed, to be a risk factor for AD. The aim of the study was to compare the distribution of Val-66Met variants in male and female healthy persons, patients with mild cognitive impairment (MCI) and patients with AD.

Methods

BDNF Val66Met was genotyped with RT-PCR method from DNA extracted from blood samples obtained from 211 AD patients, 20 MCI patients and 144 healthy age-matched controls, recruited at the Psychiatric Hospital "Vrapče" and Department of Neurology, Clinical Hospital Centre Zagreb. AD patients were further subdivided according to the early/ late onset of AD and presence/absence of psychotic symptoms.

Results and conclusion

Patients with AD, MCI, early and late onset of AD, psychotic and non-psychotic AD, and healthy persons had similar frequency of the BDNF Val66Met variants. When divided by gender, significant differences in the frequency of genotypes, and Met carriers versus Val homozygotes were detected within male or female patients with psychotic AD. Although BDNF Val66Met was not confirmed as a susceptibility factor for AD, the results suggested a possible association between Met carriers of the BDNF Val66Met, psychotic symptoms of AD and gender in AD.

Basic research and neuropathology of AD (OP - 1 / 3)

CYTOPATHOLOGICAL CHARACTERIZATION OF THE BRAIN IN A RAT MODEL OF SPORADIC ALZHEIMER'S DISEASE

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Objective

Sporadic Alzheimer's disease (sAD) is a uniquely human condition, which must be studied in suitable non-genetically engineered model. Croatian scientist developed such a rat sAD model by intraventricular injection of streptozotocin, agent selectively toxic to particular brain cells which causes behavioural and neurochemical changes that resemble AD, but needs cytopathological characterization for its validation. This will be accomplished by collaborative research funded by Unity Through Knowledge Fund (UKF). UKF project aims to develop new installed capacity for research into sAD in Croatia, also to develop clear and tangible evidence of a functioningcollaboration between home institutions of Croatian scientists living in Croatia and abroad, and finally to establish a new line of research to further characterize rat model of sporadic AD developed in Croatia.

Methods

The project will employ a battery of light- and electron microscopic cytopathological methods to reveal amyloid-containing, senile plaque-like and neurofibrillary tangle-like lesions, as well as neuronal loss in order to test the hypothesis that the STZ-treated rats exhibit progressive AD-like pathology as time after injection increases. In full compliance with the UKF guidelines, this project is also designed to support basic and applied scientific research to create new knowledge and to directly and indirectly strengthen the Croatian biomedical infrastructure and economy.

Results

The cytopathological brain analysis in this rat sAD model will provide data for correlation with the behavioral and neurochemical deficits on a dose-and time-dependent basis. This will further enable opportunity to characterize, compare and contrast AD-like lesions in the Croatian rat sAD model with actual patients with AD. The results of this research will provide a solid basis for future substantial international funding opportunities, and will also serve as a catalytic or "seeding" element to continue and expand the development of the biotechnology industry relevant to AD in Croatia.

Conclusion

The results of this UKF funded research will substantially contribute to understanding sAD pathophysiology and in the long term enable exploration of effective, targeted treatments for this major societal problem, leading to benefit of AD patients and society.

Acknowledgement

Supported by Unity Through Knowledge Fund. Additionally supported by MZOS and DAAD.

Basic research and neuropathology of AD (OP - 1 / 4)

IMPORTANCE OF NON-COGNITIVE SYMPTOMS IN ALZHEIMER'S DISEASE

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The current clinical criteria for diagnosis of AD are focused mostly on cognitive deficits produced by dysfunction of hippocampal, entorhinal and high-order neocortical areas (e.g. the Mini-Mental State Examination scores reflect mental state across exclusively cognitive domains), whereas noncognitive, behavioural and psychological symptoms of dementia (BPSD) such as disturbances in mood, emotion, appetite, and wake-sleep cycle, confusion, agitation and depression have been less considered. The early occurrence of these symptoms suggests brainstem involvement, and more specifically of the serotonergic nuclei. In spite of the fact that the Braak and Braak staging system (BBSS) and National Institutes of Aging - Reagan Institute (NIA-RI) neuropathological diagnostic criteria do not include their evaluation, several recent reports drew attention to the possibility of selective and early involvement of raphe nuclei, particularly the dorsal raphe nucleus (DRN), in the pathogenesis of AD (Simic G. et al., Does Alzheimer's disease begin in the brainstem? Neuropathol. Appl. Neurobiol. 2009; 35: 532-554). From a number of standardized instruments that have been developed for the assessment of non-cognitive symptoms in dementia the following three are the most validated: the Neuropsychiatric Inventory (NPI), the AD Assessment Scale-Noncognitive portion (ADAS-noncog) and the Behavioral Pathology in AD Rating Scale (BEHAVE-AD). The NPI evaluates delusions, hallucinations, agitation, anxiety, dysphoria, euphoria, irritability, disinhibition, apathy, and aberrant motor behaviour; the ADAS-noncog covers a variety of behavioural symptoms, including tearfulness, depression, loss of concentration or increased distractibility, uncooperativeness, delusions, hallucinations, pacing, increased motor activity, tremor, and appetite changes, whereas the BEHAVE-AD focuses on paranoia and delusional ideation, hallucinations, activity disturbances, aggressiveness, diurnal rhythm disturbances, affective disturbances, and anxieties and phobias. Expanding our understanding of the raphe nuclei, particularly the DRN involvement in the early stages of AD to functional concepts beyond neuropathological descriptions, will likely have a strong impact on our understanding, detection and tracking of BPSD and AD progression, and on the development of new therapeutic strategies.

Basic research and neuropathology of AD (OP - 1 / 5)

MECHANISMS OF ALZHEIMER'S DISEASE DEVELOPMENT, ROLE OF INFLAMMATION

TERZIĆ J

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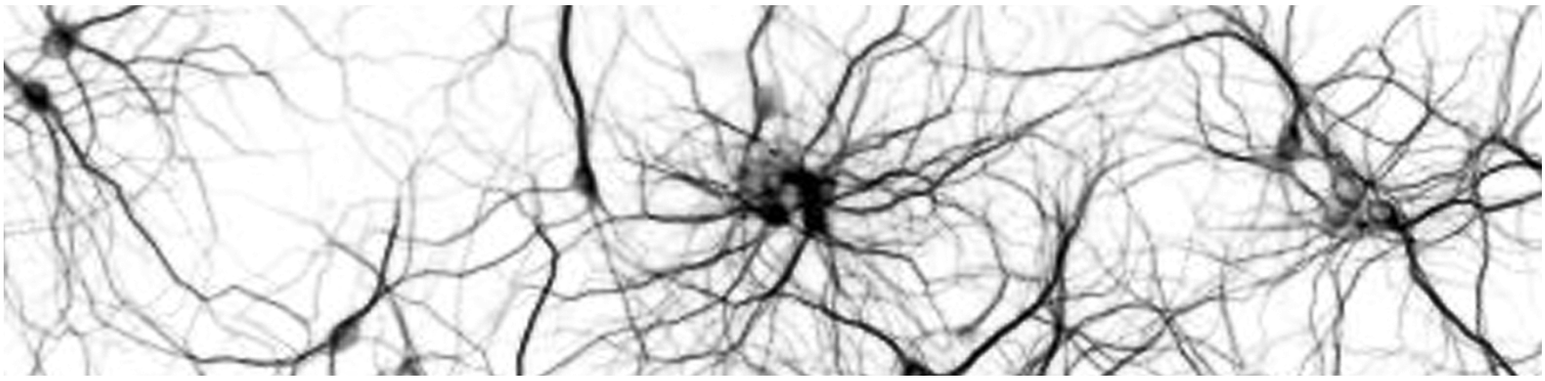
Alzheimer's disease is a severe neurological disorder characterized by loss of memory and intellectual deterioration that leads to death within 3 to 9 years after diagnosis. Over 35 million people worldwide have Alzheimer's disease mostly affecting older individuals. Studies on centenarians show that age is not the only risk factor for Alzheimer's disease development. However risk among individuals over 85 years of age is very high, reaching over 30%.

Many molecular abnormalities were found in Alzheimer's disease but it seems that underlying event is accumulation of misfolded proteins in neuronal cells. Accumulated proteins trigger oxidative and inflammatory damage to neurons that leads to energy abnormality and synaptic dysfunction. Discovery of mechanisms involved in Alzheimer's disease development open possibility for introduction of novel diagnostic and therapeutic interventions. Mechanisms underlying Alzheimer's disease development with emphasis on inflammatory processes will be discussed.



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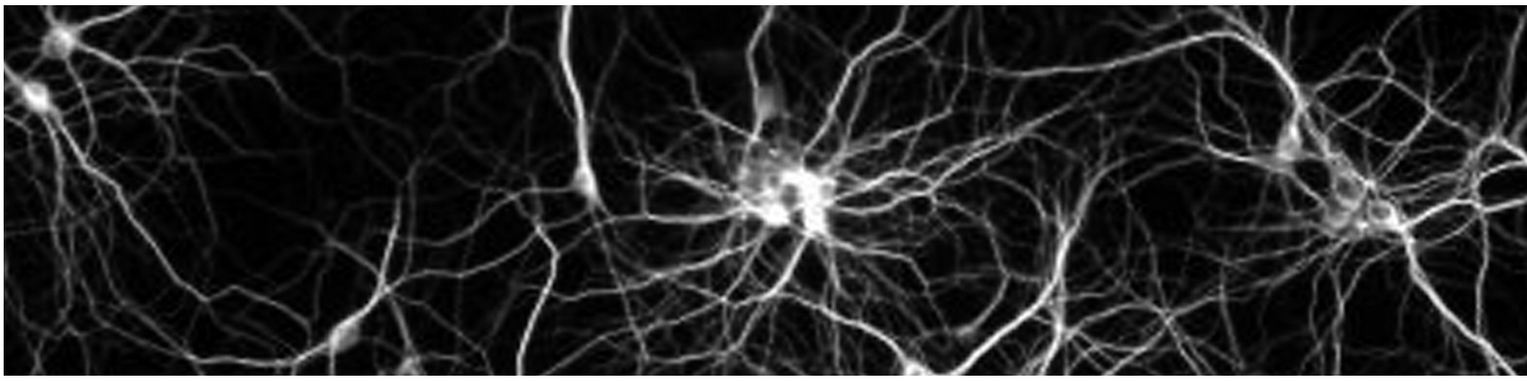
Abstracts of Oral Presentations

Rana dijagnostika AB
Early diagnostics of AD

OP-2 (1-2)



Early diagnostics of AD (OP- 2 / 1)

THE CHALLANHE OF EARLY DIAGNOSIS OF ALZHEIMER'S DISEASE

BABIĆ T

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Drugs that modify the pathology of Alzheimer's disease (AD) are now entering clinical trials. For treatment to be most effective, the regimen must be started before significant downstream damage—ie, before clinical diagnosis of AD, at the stage of mild cognitive impairment (MCI), or even earlier. Patients with MCI are at high risk for dementia, but not all patients with MCI develop AD.

Two complementary modalities, cerebrospinal fluid (CSF) biomarker and imaging studies, are making the early diagnosis of AD possible.

The first biomarker studies to predict the decline from MCI to AD used CT scanning of the hippocampal region. A longitudinal study reported associations between progressive hippocampal volume loss and increases in hyperphosphorylated tau and decreases in A_l-42 concentrations in MCI.

CSF and imaging modalities have complementary advantages. Diagnostic separation between healthy people and those with MCI was raised to nearly 90% when hippocampal volume measures were combined with either CSF measures of hyperphosphorylated tau. CSF studies can provide diagnostic specificity for AD.

In conclusion, advances in the early diagnosis of AD, made possible by the combined use of CSF assays for amyloid and tau pathology, will encourage a revision of the current clinical standards for the diagnosis of the disease and provide the rationale for early treatment. As in many other diseases, early, perhaps preclinical treatment, could be the most effective strategy.

Early diagnostics of AD (OP - 2 / 2)

CLINICAL IMPLICATIONS OF ALZHEIMER'S DISEASE GENETICS

ORUČ L

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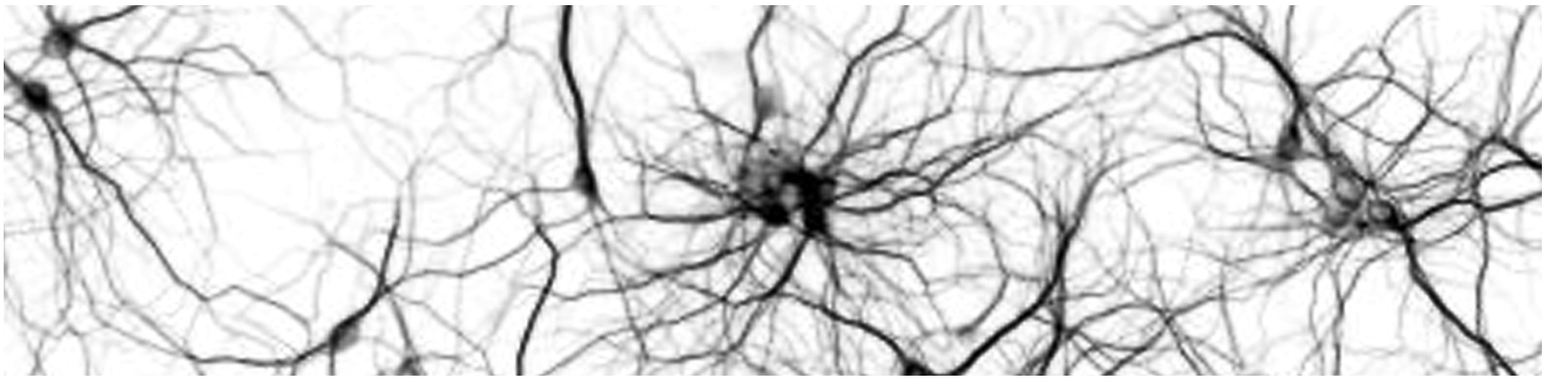
Alzheimer disease (AD) as the most common form of dementia is complex in its genetic etiology. However, the discovery of mutations in presenilin 1, amyloid precursor protein and presenilin 2 genes responsible for rare early onset familial autosomal dominant AD contributed a lot into insight of AD pathopsychology, and several drugs are already in development on the basis of genetic research. Finding of specific polymorphism in apolipoprotein E (APOE) gene as risk factor for late onset AD may play a part in early detection, intervention, prevention, genetic counseling and predictive genetic testing for those with a family history of AD.

Presently, although commercially available APOE genetic test does not have high prognostic power to be clinically valuable on individual level it is highly predictive on group level. Therefore, knowledge on genetic risk components liable for development of this heterogeneous and complex disorder with acceptance of probabilistic reasoning for physicians and their patients must be crucial in future clinical practice. Even if AD genetic findings do not provide too many possibilities for clinical use right now in a manner of building up more efficient pharmacological treatments or risk estimation, excluding those with uncommon autosomal dominant forms of AD where specific mutations are already known, they offer enormous promise for generations to come.

A lot has to be done in identification of more genes implicated in early and late onset of AD, as well as to become aware how these genes operate either alone or in interplay with other genes and environmental factors to generate full blown disorder.



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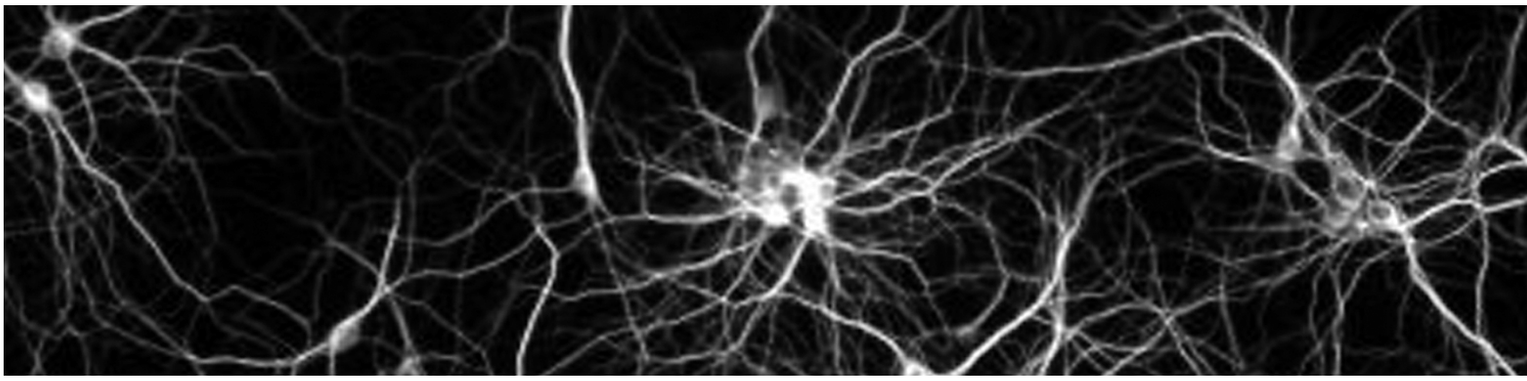
Epidemiologija i čimbenici rizika AB
Epidemiology and risk factors for AD

OP-3 (1)



Epidemiology and risk factors for AD (OP – 3 / 1)

THE PREVALENCE OF DEMENTIA IN CROATIA

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Aim

To estimate the number and prevalence rate of dementia including Alzheimer's disease in Croatia, and to compare the prevalence rates of dementia between Croatia, EU27 and some neighbouring countries.

Methods

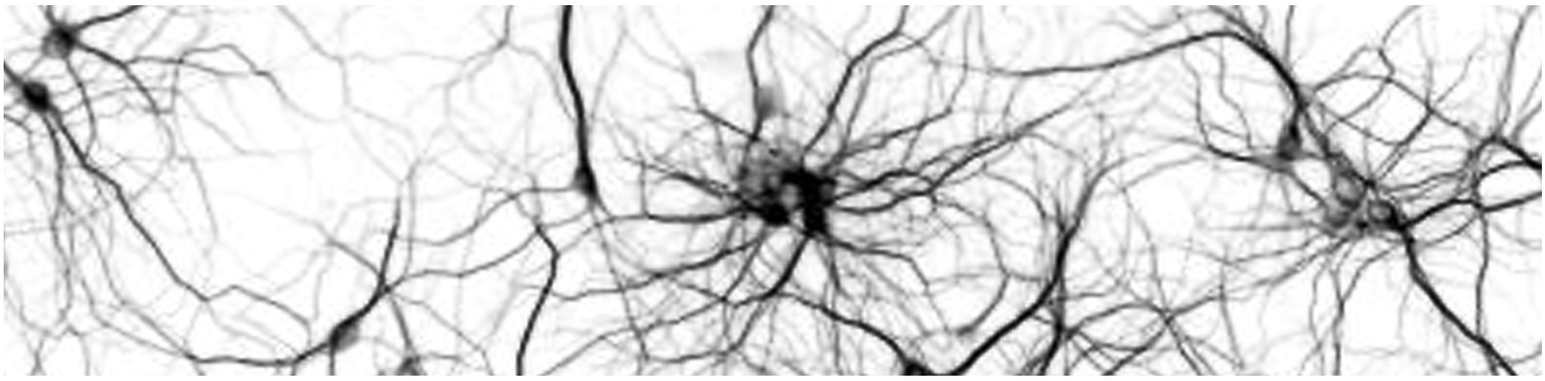
The calculations are based on the methods of the Ferri et al. study and EURODEM study. These studies used estimated percentage of people with dementia within a particular age. For Croatian population was used 2005 mid year estimate. The data for EU27 member states, Slovenia, Hungary and Austria are taken from Alzheimer Europe, and are calculated according to methodology of the same studies.

Results

The calculations for Croatia indicate an estimated 43,372 to 50,068 people with dementia (0.98% to 1.13% of total population). Although in the age up to 69, more men than women suffer from dementia, the total number of women with dementia (31,776) is significant higher than total number of men (18,292) (using EURODEM method). This is a result of greater proportion of women in older population in Croatia. The estimate for the 27 member states of the EU indicate that 5,526,488 to 6,120,842 people suffer from dementia which represents between 1.13% and 1.25% of total population of the EU27. For Slovenia is estimated that 0.97% to 1.09% of total population have dementia. Estimated prevalence rate for Hungary is 0.87% to 1.00% and for Austria is 1.15% to 1.27%.

Conclusion

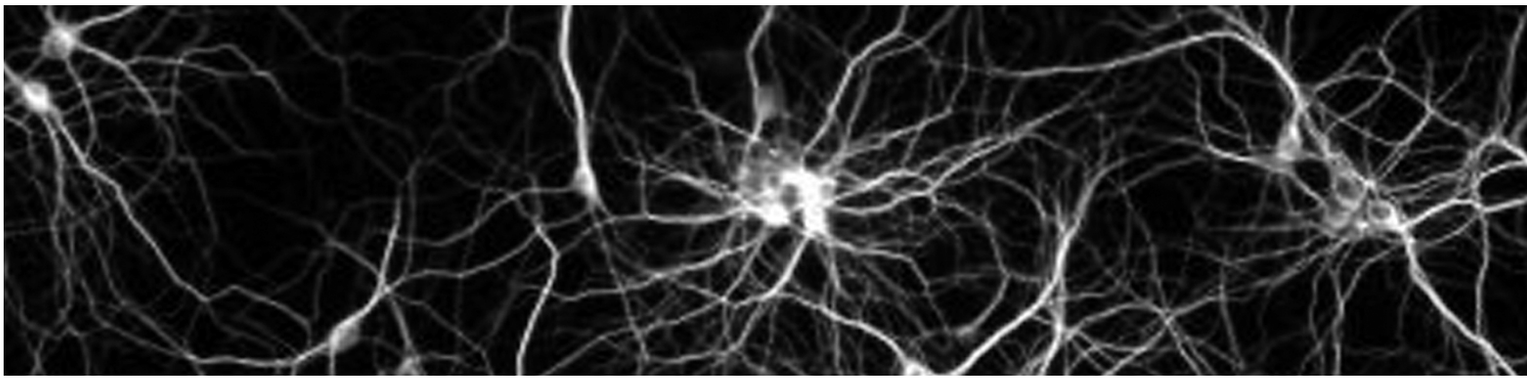
Estimated prevalence rates of dementia for Croatia demonstrate similar prevalence rates of dementia for EU27 member states as well as for selected neighbouring countries. The number of people with dementia in Europe as a percentage of the population has increased in last decades. Similar to European trend Croatia can expect increase in prevalence of dementia including Alzheimer's disease linked to the general aging of the population.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Klinička istraživanja u AB
Clinical research in AD

OP-4 (1-4)



Clinical research in AD (OP - 4 / 1)

PITFALLS IN CONFIRMATORY CLINICAL TRIALS IN ALZHEIMER'S DISEASE

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In a progressive condition like AD, therapeutic benefit with an active drug can be represented as an improvement in a score on a particular test, by stabilization on the test, or by less than expected decline, all by comparison with the placebo-treated control group. Therefore, the expected decline with placebo treatment, which in theory represents the natural course of cognitive decline with AD is a very important element within the clinical trial. Thus error in clinical ratings whether by inaccuracies, imprecision, failures to follow or lack of operational protocols for applying methods, or bias, have been shown to increase the variance in data thereby decreasing active drug-placebo group differences. This increased variability reduces the possibility for reaching statistical significance for differences in outcome measures.

These effects are more prominent in so called "add-on" trials where study subjects are exposed to standard treatment, and where cognitive deterioration is definitely slower or milder than in subjects with no treatment.

Similarly, measurement errors and a lack of specificity during diagnostic evaluations and subject qualification for eligibility for participation in a clinical trial can lead to inclusion of subjects who are incapable of responding to treatment because of misdiagnosis, genetics, or specific pathology.

Each of these factors reduces the power of a clinical trial to detect drug-placebo differences, requiring additional sites, additional subjects, more investment in training investigators, with risk of recruiting clinically inexperienced investigators and need for increased resources for monitoring sites. Each of these contribute to further compromising the integrity of the clinical trial. Studies have also shown how inaccuracy and imprecision in outcome ratings cause clinical trials to fail as the increased variability compromises power, further complicated by adding subjects to increase power.

Given these concerns, this article discusses the challenges of proper selection of AD patients for randomization in clinical trials, and the proactive role of trial medical management in this process.

Clinical research in AD (OP - 4 / 2)

INFLAMMATORY MARKERS IN ALZHEIMER'S DISEASE

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Aim

Literature data suggest that the inflammation-related mechanisms could be involved in the pathogenesis of neurodegenerative disorders like Alzheimer's disease (AD). The immunohistochemical studies have shown the co-localization of amyloid plaques and inflammation-related proteins (complement factors, acute-phase proteins, cytokines) in the brain clusters of activated microglia. Interleukin la, 1(3 (IL-la, IL-ip), interleukin 6 (IL-6) and tumor necrosis factor-alpha (TNF-a) belong to the pro- inflammatory cytokines, while interleukin 10 (IL-10) is an anti-inflammatory cytokine. These cytokines are the important mediators of inflammatory processes, related to neuropathology of the neuronal cell death. The aim of the study was to determine the genetic variants of cytokine and ApoE genes in patients with AD and healthy controls.

Methods

The study included 207 patients with AD and 90 sex and age matched control subjects. The cytokine and ApoE gene polymorphisms were genotyped by TaqMan Real-time allelic discrimination technique after extraction of DNA from whole blood with salting out procedure.

Results

A significant difference in IL-10 allele frequency was observed between patients with AD and healthy control. IL-10 (rsl 800629) T allele (low producer of IL-10) was significantly decreased in the patient with AD when compared with control subjects. There was no association between genetic variants of other cytokines and AD. The genetic risk factor for AD i.e. the E4 allele of the ApoE gene polymorphism was more frequent in patients with AD than in healthy controls. The 23% of patients with AD were simultaneously ApoE-E4 allele and IL-10-T allele carriers, while 68% of patients were at least one ApoE-E4 allele and IL-10-T allele carriers.

Conclusion

Our results showed the association between genetic variant of anti-inflammatory cytokine IL-10 and AD suggesting that the decreased formation i.e. lower expression of IL-10, could contribute to immunological mechanisms responsible for the development of AD. Further studies are needed for the better understanding of the inflammatory and immunoregulatory processes in AD, and for the development of anti-inflammatory treatment approaches that could slow the progression or delay the onset of AD.

Clinical research in AD (OP - 4 / 3)

DEMENTIA IN DSM-V

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Psychiatric diagnostic classifications are of invaluable importance to setting forth accumulated knowledge in psychiatric disorder diagnosis. In recent years abreast with the growth of neuroscience there have been new scientific and clinical insights from the domain of dementia which will fit in the future classifications, especially DSM-V and ICD-11, which are in preparation. In an oral presentation there will be an overview suggested by the working group DSM-V for Neurocognitive Disorders which has suggested that the new category „Neurocognitive disorders” replaces the DSM-IV category „Delirium, Dementia, Amnestic, and other Cognitive disorders”. The new term includes disorders whose main characteristic is acquired loss of cognition abilities due to brain damage or illness. It refers to all age groups if the main criteria are fulfilled, and that is decline from a previously attained level of cognitive functioning. DSM-V predicts three defined syndroms: Delirium, Major neurocognitive disorder, Minor neurocognitive disorder. The recognized etiology of the listed syndroms will be indicated by subtypes (Alzheimer's disease).

The major change regarding the definition of delirium in DSM-V is to clarify its primary symptoms which implies disturbances in the level of awareness and attention. Major neurocognitive disorder implies the earlier popular term dementia, and encompasses bigger cognitive disorder in at least one, typically two or more, cognitive abilities (attention, executive ability, learning and memory, language, visuoconstructional-perceptual ability, social cognition) whereat memory damage is not necessarily present, and causes inability of everyday selfunctioning.

Minor neurocognitive disorder indicates significant clinical states of individuals with mild cognitive impairments in one or more areas of cognition which are listed for the Major neurocognitive disorder, but their everyday life activities are intact due to activating compensational mechanisms. This syndrom earlier known as the Mild cognitive impairment is especially important because it represents a state where there is a need for early therapeutic interventions.

Alzheimer's disease can occur within the Major and Minor neurocognitive disorder.

Clinical research in AD (OP - 4 / 4)

DRUG DEVELOPMENT FOR ALZHEIMER'S DISEASE: WHAT ARE THE FUTURE PERSPECTIVES?

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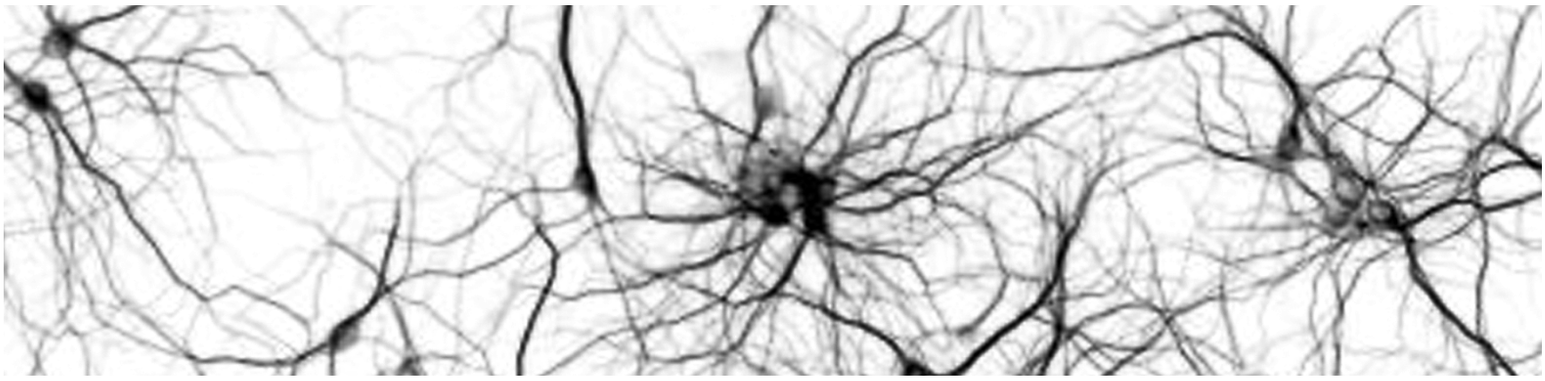
So far only three cholinesterase inhibitors and one NMDA receptor modulator are approved for treatment of Alzheimer's Disease. Despite of twenty years of intense research not any new compound was licensed for marketing, but there is a hand full of drugs in late stage clinical trials at the moment.

During the last years the field has been dominated by failures in clinical trials, for example with the AB-aggregation inhibitor Alzhemed, or the gamma secretase modulator Flurizane, in spite of positive Phase II data and huge group size in the Phase III, as well as relatively long duration of treatment (18 month's). The antihistaminic drug Dimebone made a lot of noise in the field reporting overwhelming success in a Phase II trial, but it failed to show any improvement in a Phase III trial which was finished beginning of 2010. The majority of active programs aim to reduce brain amyloid burden. Most of the studies in Phase I to Phase III are investigating the effects of active or passive immunization, and they will document the effects on brain amyloid load using invivo imaging (PIB)as well as biomarkers and of course also clinical improvement. Trials with gamma secretase modulators which should preferentially decrease brain Amyloid-beta 1-42 are in Phase III. Soon a new generation of gamma secretase modulators will enter progressed stages of clinical development. The research community is curious about the final outcome of the amyloid focused studies. Data shown so far from Phase II trials are raising discussions about changes in the clinical trial design, in particular switching to prodromal AD, following newly defined diagnostic criteria.

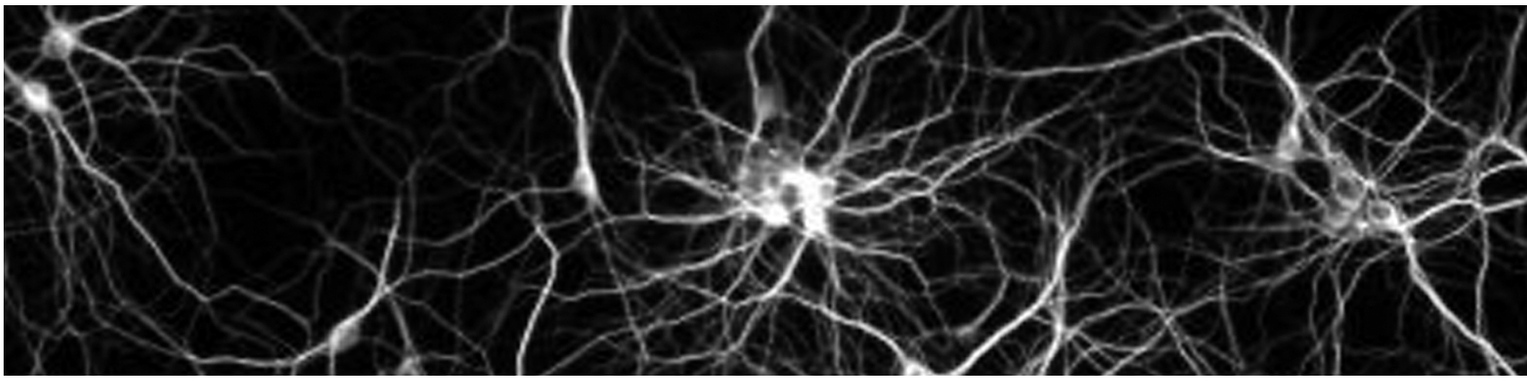
There are also new studies with cholinergic drugs in preparation, as well as Phase II programs with nicotinic compounds. Only few new drugs are targeting Tau pathology/hyperphosphorylation. It seems difficult to interfere with the regulation of phosphorylation/dephosphorylation of Tau. There are promising reports from one study investigating the effects of Rember (Methylen blue) as an inhibitor of Tau aggregation. Phase III studies have not started yet.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Klinička obilježja AB i prikazi bolesnika
Clinical characteristics of AD and case reports

OP-5 (1)



Clinical characteristics of AD and case reports (OP - 5 / 1)

BPSD: DOES IT HELP WHAT WE KNOW?

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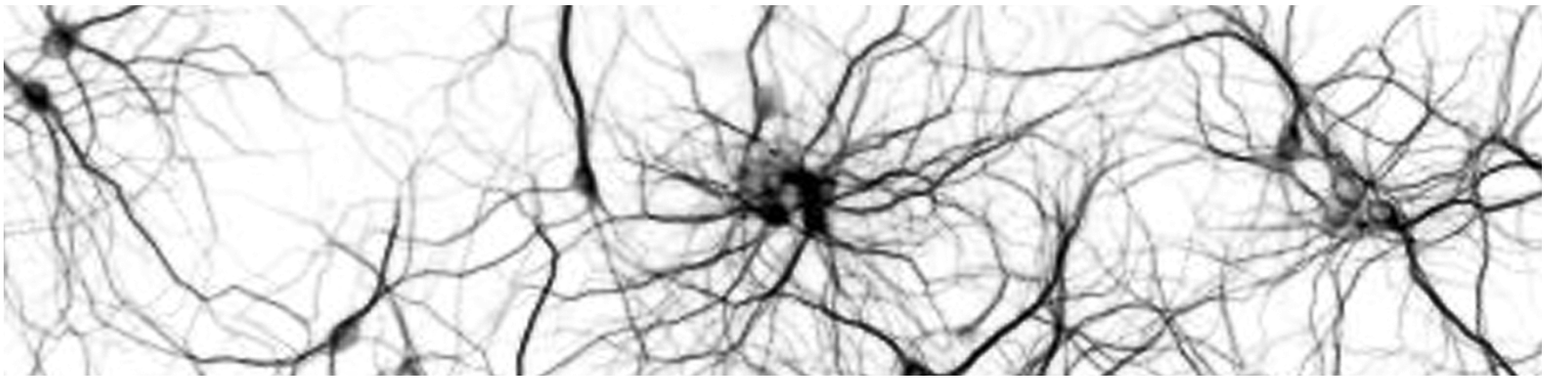
Behavioural and psychological symptoms of dementia (BPSD) has been described relatively consistently throughout the history of dementias. It has been linked to various dementias, the list of symptoms and description has however varied with the authors and the type of dementia. It is common agreement that BPSD is frequent and that further complicates the presentation of dementia, increases suffering, decreases quality of life, function and negatively impact on the patient and caregivers. It also imposes additional problems on the treatment strategies for people affected. BPSD increases the chance for hospitalization, the number of medications prescribed, cost of treatment and care and the chance for further complications along the way. The frequency of BPSD varies between few percent up to 90% of studied samples (population, hospitals, residential facilities).

Various instruments have been used, different stages of dementias have been included as well as different types of dementias. A plethora of causal and linkage factors have been identified, from pure pathological and dementia related to more environmental, psychological and social, related not merely towards illness but towards personality, premorbid factors, ways of life and social as well as support systems of affected individual. Various treatment options have been proposed and a number of educational, support and care programs have been developed to fight BPSD and its negative effect on individual with dementia. Working with people with dementia and their caregivers pose additional number of questions on the nature of BPSD. Sometimes it seems that questions outnumber the existing data of BPSD. Classification of mental disorders do not follow current knowledge on BPSD which affect real-life treatments and care.

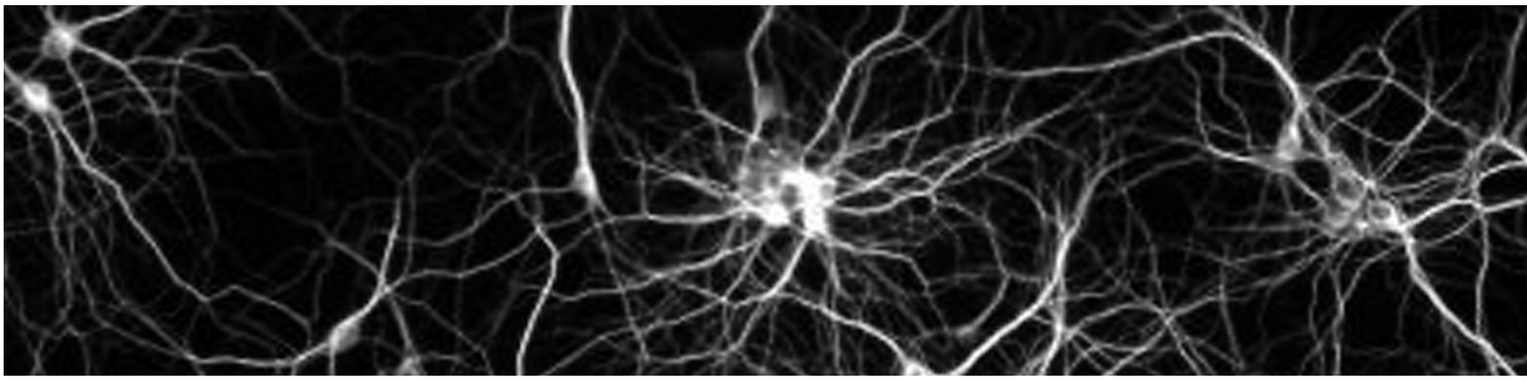
On the other hand is the term BPSD a "bag-like" construct that sometimes lacks specifity and has numerous links and relations to dementia itself (primary presentations, secondary complication, intrinsic features), it might be diagnosed in all stages of dementia and can include practically all behavioural and psychological symptoms in humans. We will present core features of BPSD and relate them to dementia with practical treatment implications. Along some integration in understanding of BPSD will be presented.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Farmakoterapija demencija
Pharmacotherapy of dementia

OP-6 (1-3)



Pharmacotherapy of dementia (OP - 6 / 1)

PHARMACOECONOMIC MODELLING OF ALZHEIMER'S DISEASE - ASSESSMENT OF MEMANTINE IN TREATING MODERATE TO SEVERE ALZHEIMER PATIENTS

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In treating of moderate to severe Alzheimer patients, N-methyl D-aspartat antagonist memantine has demonstrated better results and correlations with decreased hospitalization rate, thus decreasing total health costs. Most of pharmacoeconomic studies for this disease consider societal perspective using cost effectiveness principle and QUALY parameters. This paper considers payer perspective (Croatian Department for Health Insurance) and takes into account direct cost of the disease as requested in Croatian guidelines for drugs reimbursement. Due to lack of (inaccurate) epidemiological data, authors have undertaken further data search : the paper demonstrates cost variables taken from Croatian real life environment of treating Alzheimer patients.

The aim of the paper was to assess direct cost of illness with and without treatment with memantine, through three year perspective.

Markov model method was created for Croatian case to assess effect of the drug on hospitalization frequency and other direct treatment costs. Model stability was tested with Monte Carlo simulations.

Results demonstrate memantine domination in terms of efficiency and cost reduction, bringing cost saving not only to health budget of the payer, but also to other hospital related costs.

Pharmacotherapy of dementia (OP - 6 / 2)

THE CHALLENGING PATH OF ALZHEIMER'S THERAPY - IS THE FUTURE CLOSE?

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The period 2007-2010 marked the set back of three major clinical approaches directed to prevent aggregation, slow down metabolism or decrease accumulation of beta amyloid by means of anti-aggregants ,gamma-secretase modulators or immunization. Most treatments failed in Phase II. Why so many treatments failed in development ? We need to rethink the amyloid hypothesis , change the approach and the target and modify the clinical trial design .We propose to privilege early targets such as A-beta oligomers or early tau peptides and their biomarkers and develop signs capable of identifying individuals at risk (MCI or EMCI) as surrogate targets for preventive treatment, testing and use in clinical trials.

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Pharmacotherapy of dementia (OP - 6 / 3)

PHARMACOECONOMICS AND ALZHEIMER'S DISEASE

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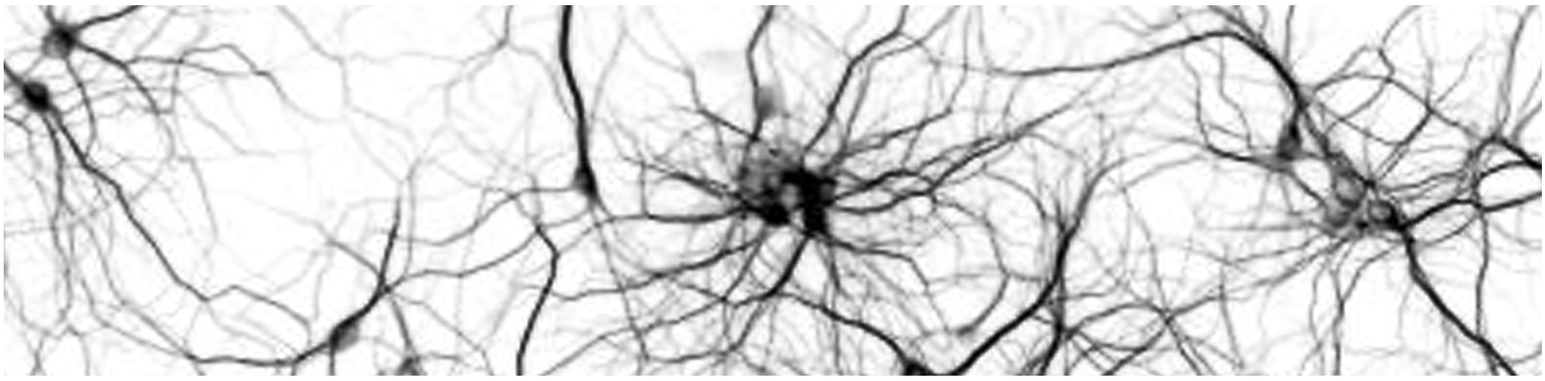
Alzheimer's disease (AD) is the most common cause of dementia worldwide and an important cause of morbidity and mortality in the elderly and a heavy economic burden on the society. According to the estimated prevalence the total worldwide societal costs of dementia was estimated to 422 billion USD in 2009. The available current treatment for AD is limited and this includes medicines as well. Because of this fact the important issue in adequate assessment of therapy should consider economic issue as well.

Therefore pharmacoeconomics, as a new discipline of health economics, is one of the important elements in transparent evaluation of new medicines and health technologies. In the treatment of AD most widely used antidementia drugs are cholinesterase (ChE) inhibitors (donepezil, galantamine, rivastigmine) and uncompetitive N-methyl-D-aspartate receptor antagonist, memantine. For the pharmacoeconomic assessment different analyses have been used and the most accepted one is cost-effectiveness analysis. In spite of methodological difficulties the quality-of-life assessment constitutes a single measure of the total impact of the disease, as well as a way of quantifying the benefits of treatment with antidementia drugs so that they can be compared with interventions in other disease areas.

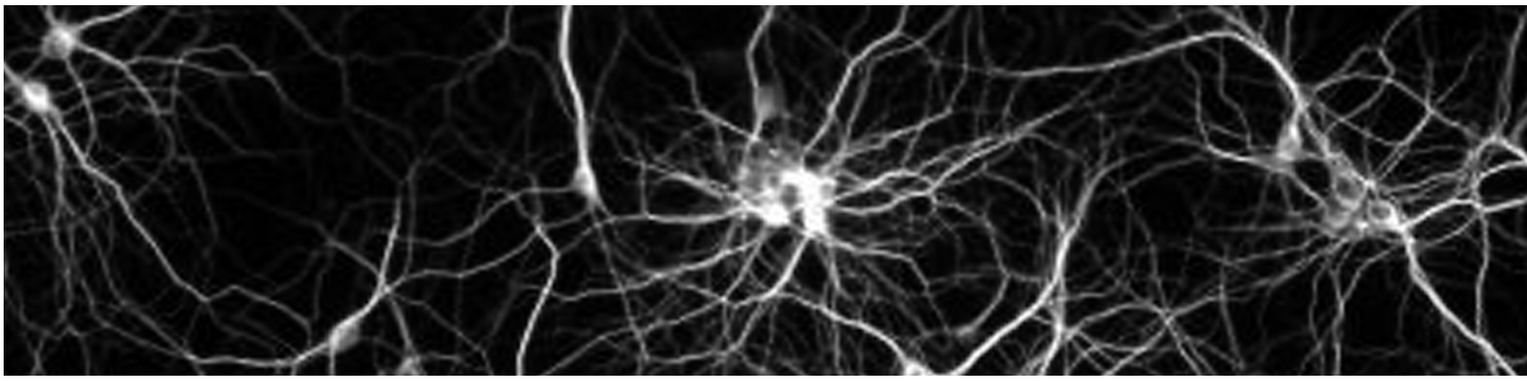
In AD patients' usage of antidementia drugs is associated with a better quality-of-life which includes reductions in functional and cognitive decline compared with patients without pharmacological treatment. The available pharmacoeconomic data from Europe and the US, despite some inherent limitations, support their usage as a cost-effective treatment in this patient population. It is also important that in the assessment of the therapy for a disease such as AD it is necessary to recognize the integrated burden of the disease, including its interaction with co-morbidities and the burden on caregivers, and to consider the consequences of competing treatment strategies from a societal perspective. For this reason each country needs to develop their own pharmacoeconomic guidelines according to the specific situation.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Skrb za oboljele od demencije
Care for people with dementia

OP-8 (1-10)



Care for people with dementia (OP - 8 / 1)

QUALITY OF LIFE AFTER STROKE IN OLD AGE

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Quality of life is influenced by a wide range of different factors. Although material status is one of these factors, it is neither an essential nor sufficient precondition for the feeling of satisfaction with life. Group of authors (Brajković L, Godan A, Godan Lj) found that old people after stroke, living in a nursing home reported higher quality of life than the elderly living in their own homes because nursing home provided 24-hour health services and care, ensured that its residents have a structured social time, and encouraged social interaction. The old people who lived in nursing home after stroke self-assessed their health better than the elderly after stroke who were living in their own homes, and they were significantly more satisfied with their personal relationships, spending more quality time with their family members and friends.

Care for people with dementia (OP - 8 / 2)

HOW TO INTEGRATE PALLIATIVE MEDICINE INTO THE CARE OF PERSONS WITH DEMENTIA

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Palliative medicine is comprehensive, active care of patients with advanced disease or serious illness and their families. The palliative medicine approach provides appropriate control of symptoms, emphasizes overall quality of life, takes a holistic approach, involves the patient and the family in decisions, and fosters good supportive communication between all concerned. Palliative medicine is practiced by a competent multidisciplinary team with integrated approach. Palliative medicine is very important for patients with dementia of the Alzheimer type (DAT) and the members of their families. Patients dying from dementia have been shown to have healthcare needs comparable to those of cancer patients. However, a patients with dementia often receive poor end-of-life care, with inadequate pain control and without access to the palliative care services that patients with cancer. Current research suggests that management of patients with advanced DAT on a Dementia Special Care Unit using a palliative care philosophy may result in less patient discomfort and lower costs than management on a traditional long-term care. Further research is needed into the effectiveness of psychological and psychopharmacological interventions in palliative medicine for the patients with DAT. There is a need for education of both nursing and medical staff to the current principles of palliative medicine in patients with DAT.

Care for people with dementia (OP - 8 / 3)

COUNSELLING PROVIDED FOR AD PATIENTS' FAMILY MEMBERS AND CAREGIVERS

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Counselling Office providing counsel for AD patients' family members is visited by family members of the diseased who typically have a lot of questions. Most frequently asked questions are what is Alzheimer dementia in its essence, on what grounds and for what reason does it arise, how and why has the behaviour of their spouse or parent changed so substantially, how to respond to such an odd behaviour and spatial and time disorientation of the diseased, how to establish communication and orchestrate patient's surroundings dealing thereby with negative attitudes of those living around the patient. The counsellor is often even asked to suggest when and how should the patient be persuaded to give up on driving, entrust his/her finances and property with someone else, and stop leaving the house unattended. The most frequent question, however, reflects on future challenges; people want to know what comes next and how to prepare themselves so as to be able to cope. The family of each and every chronic patient, families of AD patients included, sacrifices in order to beat the disease; those victimized by the disease play their roles with a lot of insecurity, shudder, feeling of injustice, fear, sorrow and anger, and almost unanimously with inevitable financial difficulties. These people seek understanding and advice, and expect their advisor and counsellor to show not only a great deal of professionalism, but a great deal of empathy as well.

The "Vagrancy Issue"

Alzheimer dementia patient can easily wonder away; this is one of the major issues, not only for the patient, but for his/her family as well. In these early disease stages, family members usually have hard time apprehending the concept of danger the patient might put himself/herself in while wondering around. The family has hard time understanding that the person who looks normal, i.e. like his/her old self, resides at the same address for a number of years and is therefore completely familiar with the surroundings, someone who used to go to work every day independently and had no trouble circulating within his/her local community, can suddenly go missing; however, such possibility does exist. Things like that can happen in a heartbeat and are to be expected with all dementia patients.

What to do when the patient goes missing??

- Notify 112 without delay, describe the person in reference as accurate as possible, together with his/her clothing, and emphasize that the missing person is dement and unable to seek help on his/her own.
- Do not postpone such a call in hope that the missing person will come home on his/her own.
- Inform the police as well; nevertheless, they typically start looking for a missing person not earlier than 48 hours after a person was reported missing; in case of dementia patients, such a wait-and-see period is far too long.

In order to avoid these situations, which are equally stressful for the patient and for his/her family, the possibility of patient's vagrancies must be brought to knowledge. Persons around the diseased must be aware that something like that can happen in a blink of an eye; some patients even climb down the window, or jump over the fence, so that the family should be warned to stay alert at all times.

The movie you are going to see next, describes the lives of two families and their experience with vagrancies of their diseased members.

Methods

Vagrancies can be prevented in the following manner: the patient should keep a mobile phone on his/her person at all times - a simple, basic, inexpensive model will do. We are the ones responsible

for charging that mobile phone on a regular basis, and we are the ones who should see to it that the phone is on patient's person at all times; this can be attained by attaching the phone to patient's belt or clothes, or by hanging the cell phone around patient's neck. The "ringing" tone should be disengaged so as to avoid further intimidation of the patient who is already scared to death.

Cell phones greatly aid rescue services in tracking down lost patients. Patients who went missing can be successfully tracked down even in less heavily populated areas, on tough hilly terrains, in sea-hugging and forested areas, and so forth. In urban settlements, target cell phone signals are somewhat harder to detect due to a number of frequencies interlacing within the same network, but such detection is still quicker and safer than a common search.

Care for people with dementia (OP - 8 / 4)

PALLIATIVE MEDICINE IN CROATIA - PROJECT „STAND BY ME"

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Although the right to a dignified life and its end is one of the fundamental human rights, there is still no institution in Croatia that could provide expert assistance to patients, their families and friends. Some estimates predict that in Croatia around 30 000 people require palliative care, but only two hundred of them get it.

Project „Stand by me" is a result of efforts of Croatian medical professionals, governmental and nongovernmental organizations to provide care for those who suffer from incurable diseases in Croatia, according to the practice of other countries. The goals of project "Stand by me" are multiple. The primary goal is to establish the first center for palliative medicine as the Croatian referral centre for other centres in the country. It is necessary to set the centre as the part of the healthcare system in order to set the grounds for other centres in Croatia. Another goal is to provide the basics for comprehensive medical education of professionals and volunteers, whose work is essential for functioning of the whole system and their mutual cooperation in multidisciplinary palliative team. Also, we should not ignore the empowerment of citizens' awareness about palliative medicine and care for people suffering from incurable diseases. The project includes engagement of medical experts, NGO's from the health sector, public institutions, media representatives and citizens themselves. Project "Stand by me" will be conducted during the 2010 on a national level, with a number of activities on a local basis in all Croatian counties. Significant number of activities will be related with the specialist palliative care in patients with dementia and their families.

Care for people with dementia (OP - 8 / 5)

THE ROLE OF PSYCHIATRIC HOSPITALS IN PALLIATIVE CARE

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Traditionally, the psychiatric patients were not candidates for palliative care. Their mean age of life was 20-30 years shorter than in general population. However, the circumstances have changed - psychiatric patients live longer and incidence of somatic disease in psychiatric population increases, at least partly due to adverse effects of novel antipsychotic (e.g. diabetes mellitus, cardiovascular disease). On the other hand, the increased percentage of elderly people in general population is followed by increased incidence of mental disorders in geriatric population. These two groups of psychiatric patients are candidates for palliative care.

Psychogeriatric Unit in the Psychiatric Hospital Vrapče was organized in 1959. because it was obvious that older schizophrenic patients had different needs than younger. During the last decades the activities of services reoriented mostly to the patients elderly than 65 years who have had mental disorders. The capacity of the unit is 99 beds. Approximately 800 patients are hospitalized every year. Mortality is app. 35-40%. The similar services are organized in Neuropsychiatric Hospital Popovača (50 beds) and Psychiatric Hospital Rab (43 beds).

What is the future of psychogeriatric services in psychiatric hospitals in Croatia? As population gets older the need of psychiatric care for geriatric patients will increase as well as the need of 30-40 % of these patients for palliative care. In psychiatric hospitals we do not entitle specialized infirmaries for palliative care but we do recognize the need for such units. The reorganization of psychiatric hospitals, due to perspectives of organization of psychiatric services in community (reduction in number of psychiatric beds for 20-30% in next five years), may create the space for the organization of units specialized for palliative medicine. These units may be organized independently from psychiatric hospitals and the psychiatrists will become members of multidisciplinary team in the terms of good praxis of palliative medicine. The organization of palliative care in such way may also contribute to the reduction of stigma due to hospitalization in psychiatric hospital.

Care for people with dementia (OP - 8 / 6)

ASSESSMENT AND MANAGEMENT OF PAIN IN THE COGNITIVELY IMPAIRED PALLIATIVE PATIENTS

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Fundamental to providing best supportive and palliative care is being able to determine when it is needed. Identifying the palliative period in an illness is fundamental to giving good palliative care. Prognostic indicators can help in defining the palliative period. The future is to achieve a gold standard approach to the care of those who are dying based on need not disease and in all care settings. Dementia is a cognitive impairment disorder characterised by difficulty in short- and long-term memory, impaired judgement and also potentially disturbance in higher cortical functions, e.g. aphasia and apraxia.

There are over 50 different causes of dementia. The NICE Guidelines for dementia care recommend that a palliative care approach from diagnosis until death be adopted for people with dementia. Patients with dementia often have concurrent physical symptoms that need attention to minimise impact on quality of life (mental confusion 83%, urinary incontinence 72%, pain 64%, low mood 61%). Pain may also be musculoskeletal in origin and associated with spasticity, gait disturbance and poor sitting posture. Total pain is defined as physical, psychological, social and spiritual .The literature suggests that the diagnosis of pain in certain groups of elderly patients was improved bay using assessment instruments, rather than simply asking „Do you have pain?"

The assessment of pain in people with moderate-to-severe cognitive impairment remains a challenge. There is evidence to support that pain is both underestimated and under-managed when people are severely cognitively impaired. An assessment tool that has been found to be reliable in the cognitively imapaired who cannot speak is th Pain Assessment in Advanced Dementia Scale (PAINAD).

The Doloplus 2 Scale was put forward by Wary et al. (1993) as a heteroevaluation of pain in elderly people and patients who are unable to communicate. It is described as a comprehensive tool. It is described as a comprehensive tool for assessing pain in non-verbal elderly people. The WHO analgesic ladder, including the titration of opioids was conceived and designed for palliative patients.

Care for people with dementia (OP - 8 / 7)

ALZHEIMER'S DISEASE - RESOURCE PROVIDING AND ECONOMICS FOR ENSURING CARE OF PATIENTS IN PALLIATIVE MEDICINE

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Aim

To demonstrate possible ways of organizing and providing resources in palliative care of Alzheimer's disease patients in Croatia, using health economics and supporting centre.

Methods

Analysis of present hospital and other capacities, epidemiology, current health approaches, recommendations based on real life and secondary data.

Results

Results demonstrate that there is a significant amount of unnecessary hospitalizations making patients spend too many days institutionalized with quite low quality and lack of palliative care, whereas the numbers from secondary data analysis indicate that hospital capacities and possibilities may provide high quality hospital palliative care.

The research revealed numerous potential sources of financing and providing resources for palliative care for Alzheimer's disease patients. Such are insurance companies (basic, additional, private); philanthropy and humanitarian actions; volunteers; donations in money, services, drugs and goods; taxes (state, county and city); foundations, real estate; scientific, professional and marketing projects; sponsorships, bank loans etc. Unfortunately most of these sources are inadequately or totally unused or unrecognized.

On the other hand, numerous organizational and direct health costs in Alzheimer's disease palliative care come in terminal disease phase, additionally burdening life of patients and their families: facility, overhead, various services, insurance, material and drug, food, human labour (professionals and volunteers) and transport costs. All of these indicate that palliative care should be based on a non profit model. Such model should be supported by the work of a national centre for palliative care and network of county centres, needed to gather, organize and provide resources for palliative care.

Conclusion

It is necessary to completely redesign organizational approach in Alzheimer's disease palliative care. Such redesign should be funded from various resources, whereas one national centre with counties network for palliative care would efficiently organize and rearrange capacities, potentially help acute hospitals, palliative hospices and carers in family and community, enabling higher quality in care of terminal patients with less needed number of doctors and nurses.

Care for people with dementia (OP - 8 / 8)

ROUND TABLE: "ORGANIZATION OF CARE PROVIDED TO THE PATIENTS SUFFERING FROM ALZHEIMER'S DISEASE AND OTHER FORMS OF DEMENTIA IN THE ISTRIAN COUNTY"

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With his round table discussion we're aiming at presenting the organization of care provided to the patients suffering from Alzheimer's disease and other forms of dementia in the Istrian County. We would like to point out the importance of cooperation between Alzheimer's Disease Association, "Alfredo Štiglić" Nursing Home and organizational units of Day Care Centre for the Elderly and Enhanced Care Centre, local community, local self-government units and Istrian County.

The care for the elderly is one of the five priorities of the Istrian County regering public health and the care for the Alzheimer's patients poses a special problems due to the lack of organized care within the community. Significant boost to the organization of care for these patients was a Project of the Enhanced Care Center for patients suffering from Alzheimer's and other forms of dementia, which complies to the goals set by the social reform at the level of the Republic of Croatia, and which had been financed by the donated funds from Innovation and Education Programme until 31 July 2007 and after that by the County and local self-government. The care about those suffering from side diseases has been organized in a way that these patients and their relatives come to the Association's Counselling Centre where there's a multidisciplinary team, with further care being implemented within family, Day Care of Enhanced Care Centre.

The Centre is the first such unit in the Republic of Croatia that includes residential accommodation for 13 users and one unit for temporary accommodation. At the round table Grubišić-Juhas V will discuss the launching of the Enhanced Care Centre project; Ereš V will talk about the organization of care for the diseased within the Enhanced Care Center; Apostolovski D about the organization and work of the Day Care Centre as well as the Counseling Centre; Rojnić E about the care for the elderly in the City of Pula; Breški D and Šain I about the role of a psychiatrist within the Enhanced Care Centre and the Counseling Centre.

Care for people with dementia (OP - 8 / 9)

IMPORTANCE OF PALLIATIVE UNIT IN MEDICAL CARE OF GERIATRIC PATIENTS

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Requests for placement in nursing home for older age people are increasing due to aging and urbanization. 75% of tenants are older than 75 years and the main cause for placement in the nursing home is medical indication. Multimorbidity is often present and the leading diseases are cardiovascular, psychiatric and neurological diseases. More than 40% of tenants are on stationary units. These units admit patients directly from hospitals or rehabilitation units due to chronic and incurable diseases. The mortality rate is extremely high, between 30-40%. About 30% of tenants are on stationary units and are in terminal phase of disease. Therefore stationary unit should be transformed to geriatric palliative care unit. Palliative care must become compulsory method of care for chronic, terminal patients in nursing homes for older age people.

Care for people with dementia (OP - 8 / 10)

EXPERIENCE IN WORKING WITH INDIVIDUALS SUFFERING FROM ALZHEIMER'S DEMENTIA IN ALL- DAY SERVICE

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Aim

The goal of working with people suffering from Alzheimer's dementia is slowing down the progressive decline of their cognitive abilities and protecting the satisfaction of their basic needs and quality of life and their environment.

Method

The individual approach of a social worker to people suffering from Alzheimer's dementia begins with the evaluation of the scale of cognitive defects. That is why we implement the Mini Mental State Test (Folstein) which we use in monitoring disease progression.

We create individual plan for each of them which is based on questionnaires which the family members and users (depending on the stage of disease) fill in.

In that paper we apply:

- method association - users should join the proposed couples
- recognition method - they should recognize the figures, objects, colors and songs.
- method of reconstruction - we read some of terms after that they should remember as
- many as they can.
- method of grouping concepts / subjects by affiliation
- method of memories and completion of sentences - this method helps users to detect and confirm their personal identity through understanding the past
- method of exercises for mobility and coordination of movement
- method of maintaining social contacts

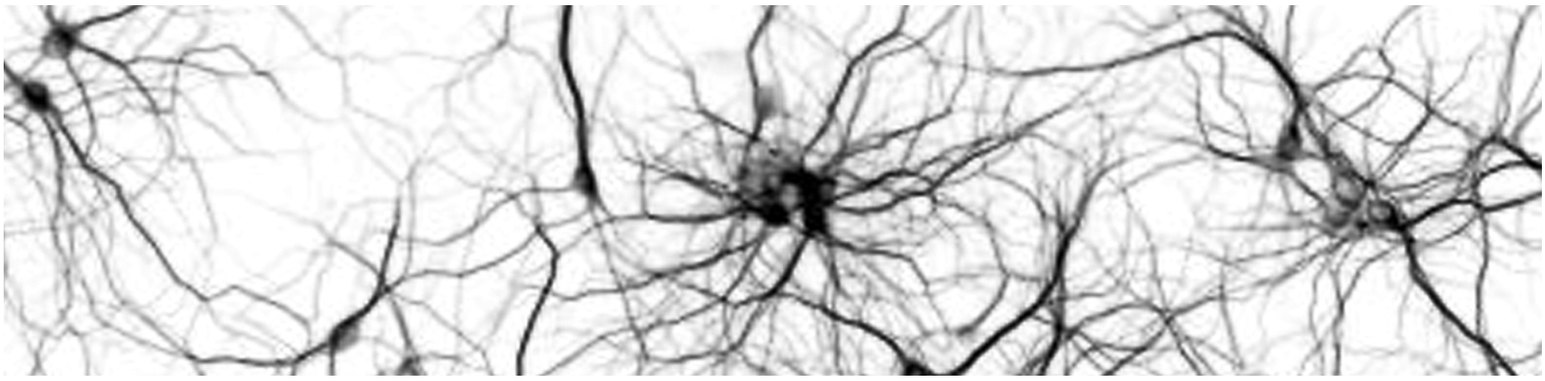
Results

By applying the methods above we get very important results. They are:

- the utilization of remaining options in terms of emotions and cognitive abilities of users
- retaining the verbal and nonverbal abilities
- insight about the reaction of users when they solve their tasks
- the postponing of immobility, and other diseases
- empowerment of personal and parental resources

Conclusion

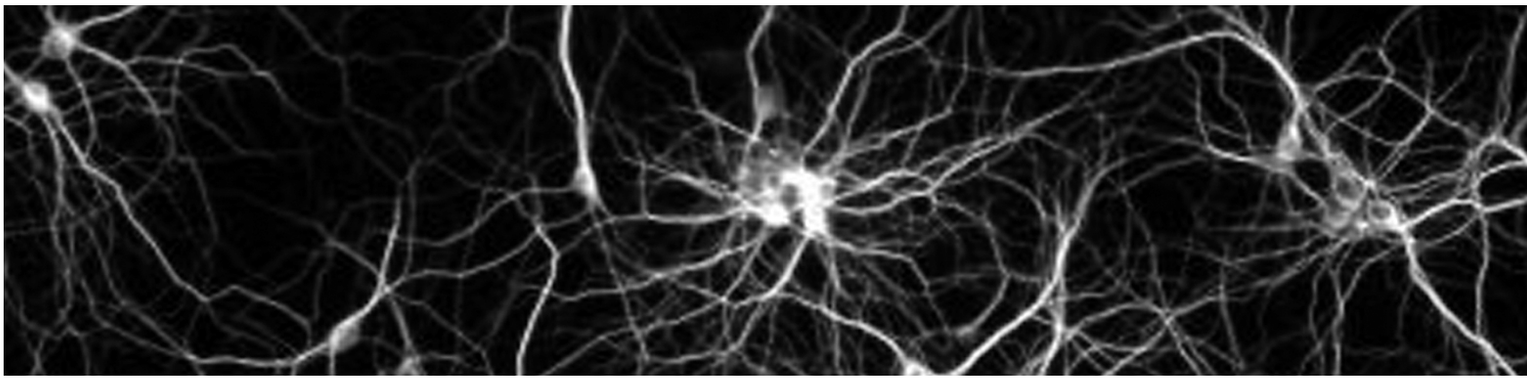
In the paper we will apply the aforementioned methods which help us to get to know and understand the "inner world" of people affected by these diseases, and constantly working on raising the quality of life of users.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Ne - AIzheimerove demencije
Non – Alzheimer dementia

OP-9 (1)



Non – Alzheimer dementia (OP - 9 / 1)

CRIME OR ILLNESS? THE MYSTERY OF FRONTOTEMPORAL DEMENTIA

RADMAN I

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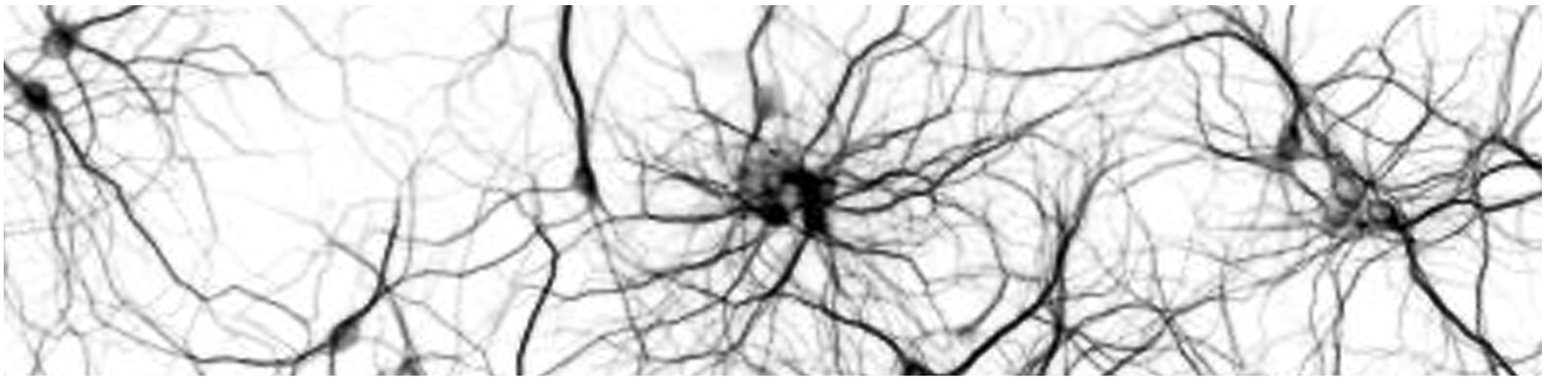
We report the case of a 56 year old man suffering from a major depression with psychotic symptoms, who was transfered to our hospital from prison. The patient was arrested after he had tried to kill his wife two years ago. Since then he has been in psychiatric therapy because of a depressive syndrome. At the time of his admission he was only partly medicated. Prior to that he was already marked by a change of personality, social isolation and depressed mood.

After several weeks of treatment in our hospital with combined antidepressive and neuroleptic medication, consisting of sertraline, trimipramine and olanzapin, the patient improved significantly as to his affective status, and showed remarkable stabilization. However, slight cognitive deficits were still persistent. The neuropsychological investigation showed dysfunction of the frontal brain lobe.The cranial MRI scan showed signs of cortical atrophy in the frontal and temporal lobe, and the PET of the brain showed hypometabolism in the frontal cingulum.

Altogether, the findings of the anamnestic data, the psychopathology, the somatic and blood cell examinations, the anatomical and functional scans of the brain, the neuropsychological testing and the clinical course can be interpreted as an early dementia of the frontotemporal lobe.

Frontotemporal dementia is a rare subtype of a progressive cognitive decline. Its most prominent clinical features are alterations of personality, motivation, and social conduct whereas memory and orientation remain largely unimpaired. According to DSM-IV the diagnosis is mainly clinical including changes in behaviour, language, etc., using also image exams and neuropsychological tests. Symptoms can be classified (roughly) into two categories which underlie the functions of the frontal lobe: behavioural symptoms (and/or personality change) and symptoms related to problems with executive function. Language skills can be affected in a number of ways with two broad patterns. Some patients remain fluent with normal phonology and syntax but show increasing difficulty in naming and word comprehension, known as semantic dementia (caused by atrophy of the anterior temporal lobes, typically with an asymmetric pattern). Other patients, by contrast, present with a breakdown in speech fluency due to articulation difficulty, phonological and/or syntactic errors but preservation

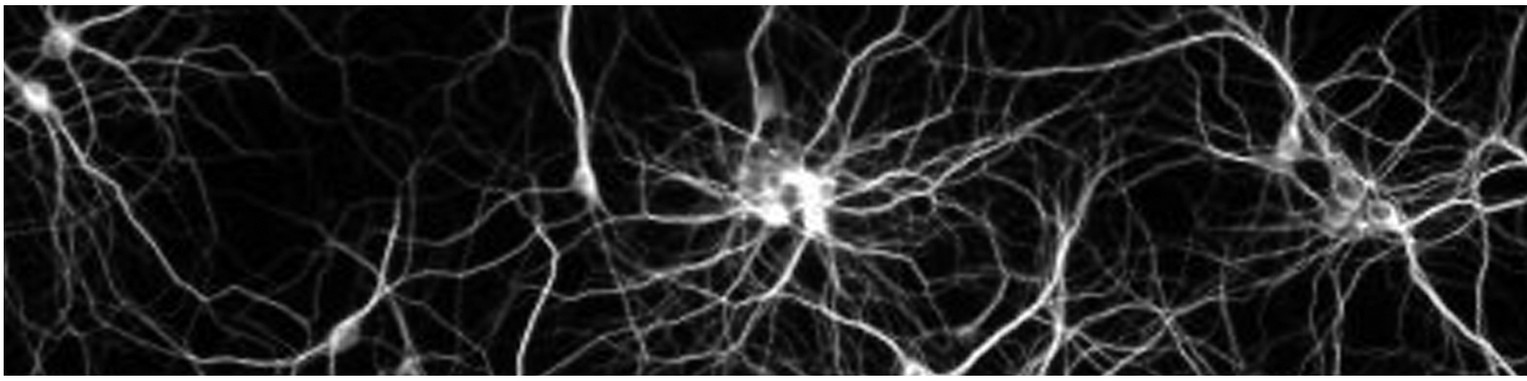
of word comprehension, are referred to as examples of a progressive nonfluent aphasia. It is difficult to identify frontotemporal dementia because it's major symptoms mimick the non-organic psychiatric disorders including mania, obsessive-compulsive disorder, schizophrenia, depression and personality disorder. Another problem of diagnosis is that all clinical instruments that are available for assessing cognition, activities of daily living and non-cognitive symptoms have been tailored to the prototypic dementia in Alzheimer's disease and are less sensitive to the psychopathology of the frontal lobe diseases. The burden that frontotemporal dementia imposes on caregivers is also quite different from the one encountered by families of patients with the more prevalent forms of dementias. Therefore these types of dementia are rarely diagnosed, and often with several years delay. This case illustrates the diagnostic difficulties, possible mistakes and their consequences before the diagnosis is finally established.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Kvaliteta života u demenciji
Quality of life in dementia

OP-10 (1-4)



Quality of life in dementia (OP -10 / 1)

SEGREGATIVE VERSUS INTEGRATIVE

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According to recent studies more and more residents in nursing homes are suffering to some type of moderate to severe dementia. In addition to cognitive impairments often also psychiatric symptoms and behaviour problems frequently impact the quality of life of the affected residents,their fellow residents and the nursing staff. Novel concepts of nursing care for dementia patients with behaviour problems have been developed in Switzerland against this backdrop. More and more segregative nursing stations are introduced. The comparison between segregative care for dementia patients and traditional care revealed in a set of indicators of the life quality substantial differences in favour of segregative care.

Quality of life in dementia (OP -10 / 2)

INTEGRATIVE OR SEGREGATIVE ACCOMMODATION FOR PEOPLE AFFECTED BY DEMENTIA IN OLD PEOPLE'S HOMES

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In homes for the elderly is increasingly suffering from dementia, especially Alzheimer type, as the users who have for years placed in the home, and among the newly users. Suffering from Alzheimer's disease are received into the home in varyious stagesof disease and most often when you require 24-hour care. Precisely on the basis of practical experience in the home comes to experience, that the shape of integrative care and accommodation of people with dementia, affects the quality of life of people with dementia and other users in the home. Detection of the demanding, professional medical and social care for people with dementia and work with their families, conditional on changes to the current concern.

In some countries, some studies aimed at comparing the integrative and segregativnog accommodation of people with dementia, such as USA, England, Sweden, Netherlands, France and other countries. The results are not given specific conclusions but there was a perception that the quality of life of users was better to separate departments in homes for the elderly. Users have had greater autonomy, a greater degree of mobility, more freedom in movement, fewer falls and pain, and reduced use of psychopharmacological agents (Oppikofer, Lienhard, MaBnahmen, 2005).They are also users of these separate departments stationary care in nursing homes had a greater interest in the environment, showed less negative mood and aggression, but their ability to ADC (Activities of Daily Living) were in decline, (Reiner, 2004).

In addition to improving the quality of life of people with dementia, improved the quality of life of other users located in the home. Users of the House in separate wards for patients with dementia have a need for: special education staff for the care, creation of a special team to work, adaptation of room for accommodation, the introduction of targeted concepts of health care and the target structure of daily activities for psychosocial rehabilitation. That the quality of care decisions on the quality of their lives in the home.

Quality of life in dementia (OP -10 / 3)

PROBLEM OR CHALLENGE DEMENTIA IN SLOVENIAN NURSING SPACE

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Health care as a joung scientific discipline comes at tumultuous times, when rapid and unexpected changes are taking place on various levels of our society: globalisation, economic crisis, enviromental deterioration, efforts to maintain good and safe social and health welfare, aging of the population, reduction of social and health welfare budgets, changing values ... We are faced with rationalisation and dehumanisation, all the while trying to maintain (both as individuals and as a society) a modern, efficient, safe, ethical and humane treatment of both the healthy and the sick of all ages and on all three levels of health care. Circumstances demand a quick and resolute response in order to mitigate the consequences of the global economic crisis, pollution of the environment and the change of values, the extent of which we are yet to fully understand. In such times we must take special care of the more vulnerable social groups, the elderly being one of them.

Looking back at the last five or so decades, the boundaries between age groups have shifted upward for at least ten years. What used to be 50 is now 60, and 60 is now 70 - this is a useful framework for rethinking old age and ageing (Hočevar, The Magazine for Gerontological and Intergenerational Harmony, 2009).

Looking at the present situation, the elderly population is more or less a part of the every-day life, to the extent to which their health condition (and their economic circumstances) allows them to be. Sights of elderly men in fitness centres or vigorous grandmothers fond of recreational and educational activities are not uncommon these days, not to mention those who express their vitality through their youthful style of clothes and behaviour.

In 2005 Slovenia started to prepare a comprehensive strategy of care for the elderly for the next five years, which was adopted by the government in 2006. The strategy is based on UN and EU documents, particularly on the Green Paper on Intergenerational Solidarity. This is an up-to-date document which relies on modern sociological and medical knowledge (Dominkus, The Magazine for Gerontological and Intergenerational Harmony, 2009).

At the same time some important documents relating to the system of health care are in the process of adoption. A public discussion of the renewed Health Services Act is about to begin, followed by the Health Care and Health Insurance Act and the Long-Term Care Act. The latter two have been passed back and forth numerous times between the Ministry of Health and the Ministry of Labour, Family and Social Affairs. It is an imperative to maintain a wide and comprehensive approach to both the healthy and the sick which should include humane medical treatment, empathy, ethicality, kindness and human warmth. High expectations are nurtured by the elderly as well as by those around them. The adoption of the aforementioned documents will be a welcome addition to the fields of health and social care.

EU recommendations encourage active collaboration of the elderly in the health and social care processes, stressing the socio-medical aspects of the issue. In terms of health care, this means interacting with the social workers and their professional services. Recently this interaction has been defined in collaboration with social services suppliers at a round table on long-term care, held in March this year. The conclusions of the round table underline the many changes the long-term care brings, including the shifted paradigm of care which transcends the existing patterns of organised care, the approaches to personal distress and the status of the elderly (Mali, Utrip, 2009). In this respect, long-term care is not only an upgrade of the existing systems of social security and social

and health care, but also a discontinuity, a paradigmatic breakthrough which gives birth to new forms of solidarity, help and professionalism (Flaker et al., Long-Term Care, 2008). Time will tell whether this wider, integrated approach to an individual will bring about a higher quality of life. Due to rapid changes we must soon find common interests in the coordination of domestic-environment care.

Quality of life in dementia (OP -10 / 4)

TERTIAN PREVENTION IN ALZHEIMER'S DISEASE - CARE FOR QUALITY OF LIFE OF DISEASED

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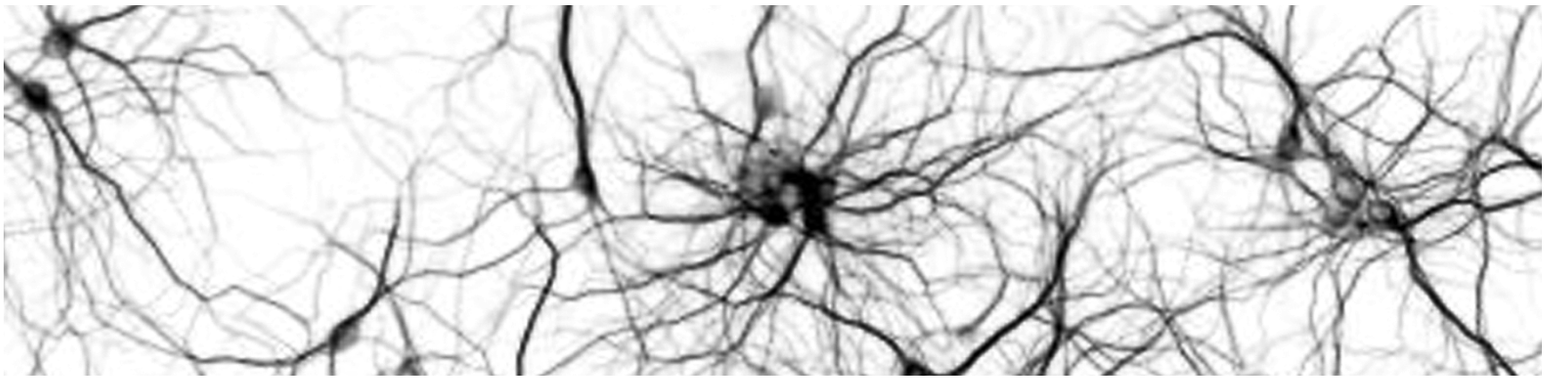
The emphasis on symptoms reduction on the use of somatic treatments had diminished interest in the quality of life (QL) of patients with Alzheimer's disease (AD). During the past decades, however, with investigation of QL there has been renewed interest in parameter of QL.

In AD the processes of adaptation can not return persons to their own characteristic baseline of happiness after that unfavourable life event. So, the assurance of QL must be given through general measures: simple advice or psychotherapy will help the patient deal with anxiety and depression. The patient should be given information about the illness as tolerated, help with the effort to maintain faltering self-esteem.

Social stimulation and structure must be sustained. The patient should be in a stimulating environment to maximize intellectual capacities. A structured schedule during the day is important to give a comfortable sense of predictability in life. Family intervention (such as giving support and advice to the family) is an important part of the treatment of AD, since family members usually have questions and concerns and may express shame or guilt if given the opportunity. It is good to prescribe low-dose medication for symptomatic relief. Symptoms that may respond to psychopharmacologic therapy include anxiety, agitation, hyperactivity, depression, irritability, disturbed sleep and psychotic behaviour.

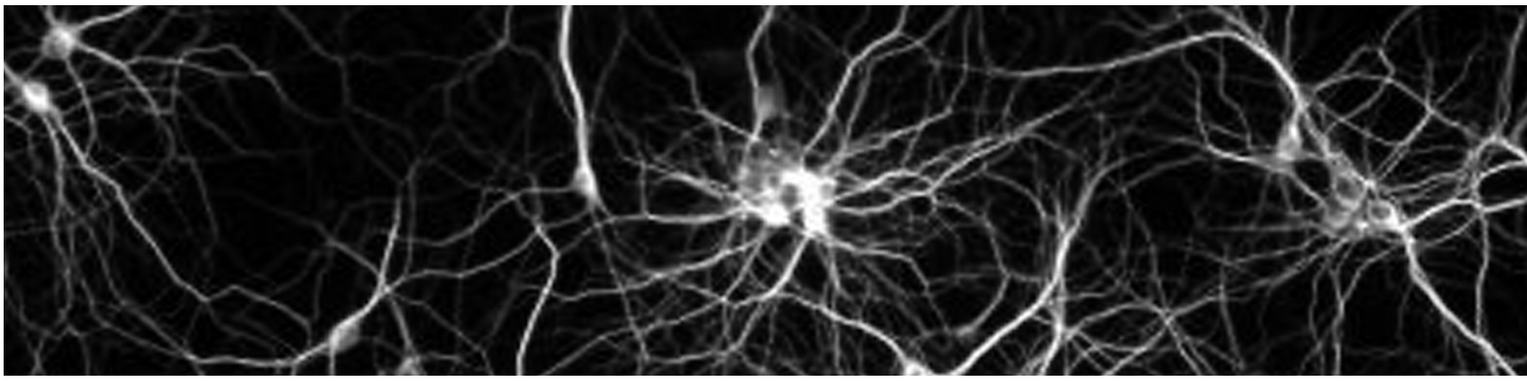
Patients in nursing homes should have free access to television, newspapers, recreational activities and pets as possible.



Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Udruge za AB i skupine samopomoći
AD Associations and support groups

OP-11 (1)



AD Associations and support groups (OP -11 / 1)

ALZHEIMER DISEASE SOCIETIES CROATIA - ESTABLISHED 1999

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In this opening lecture we will try to stress the major activities of Alzheimer Disease Societies Croatia (ADSC), since its beginnings from 1999. Our main goal, from the beginning till nowadays is the same - we want to help people with dementia (PWD), their families and careers, we fight stigma, and bring education to target and general population. Our Society doesn't have paid staff, so the whole work is done by volunteers. In our Counseling centre we have weekly meetings for families of PWD and all other interested. The ADSC has published four booklets, various leaflets, all in large number and we distributed them for free in public places. Till know our members have for numerous times spoken to media (TV, radio, newspapers) and we have organized various lectures, participate on many Meetings, Conferences and Congresses dealing with AD and dementia - all in the aim to raise awareness on dementia, and to present our work for PWD and their caregivers.

Now, in year 2010 we are organizing the 5th Croatian Congress on AD with international participation and this is the biggest meeting on AD in Croatia ever. Before this jubilee-congress we have Congresses on St. Andrews Island (2008), at Brijuni (2006) and in Zagreb for two times (2004 & 2003). Beside that ADSC organized three Psychogeriatric Symposiums on island Rab, last one in 2006. We have applied for and got several projects in connection with dementia. The ADSC was given a possibility to apply to host the Alzheimer's Disease International Conference in 2010, but the final decision was done in favor of Greece.

For last six years we celebrate the World Alzheimer's day (September 21st) on "Cvjetni trg" and "Jelačić plac" - two most popular squares in center of Zagreb. We have also organized the humanitarian public happenings called "Summer evenings on Zrinjevac" in which we raise some money for the ADSC.

Our web-site (www.alzheimer.hr) is rebuilt and till today we have more than 11 000 visits. On our 24-hours help-line (+385 91 569 16 60) we are receiving calls every day coming from whole Croatia,

but also from Bosnia & Herzegovina and some other countries from the region. We are regularly replying to numerous letters coming through e-mail (alzheimer@xnet.hr). Our work is also internationally recognized, so we become a full member of Alzheimer's Disease International (ADI) in 2006, and provisional member of Alzheimer Europe (AE). After 10 years of our work we finally got a nice place for our office, from the Government of Zagreb, in the center of metropolis (Vlaška 24). The place is now renovated and from the beginning of the year 2010 we are working regularly there.

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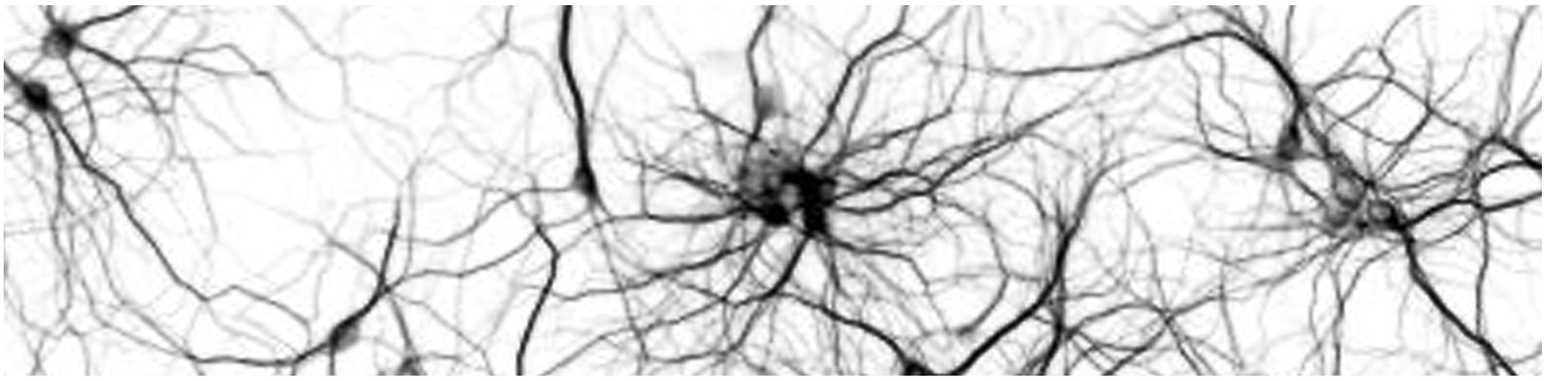
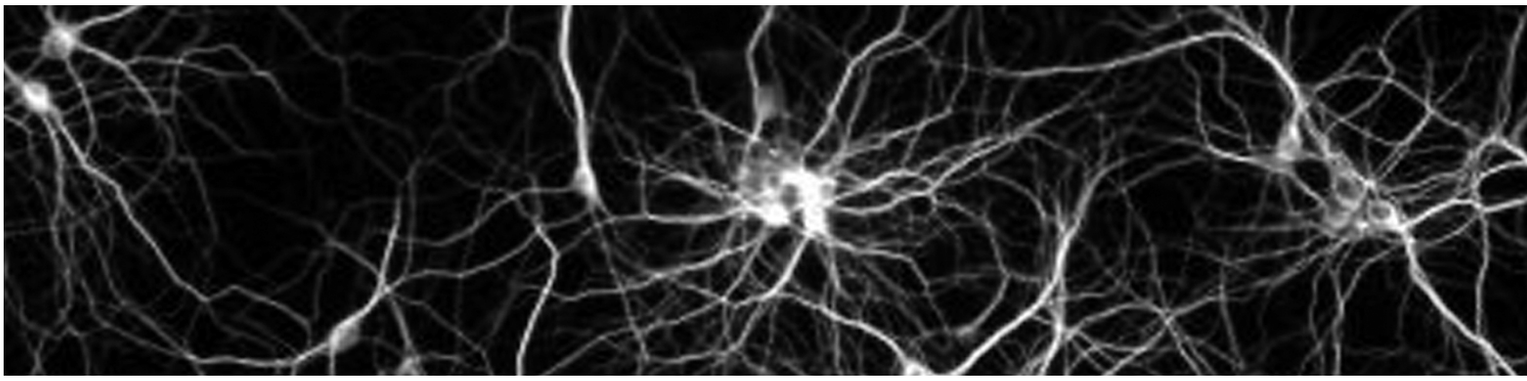


Sažeci usmenih izlaganja
Abstracts of Oral Presentations

Ostale teme
Free topics

OP-12 (1-6)



Free topics (OP -12 / 1)

NON-INVASIVE ASSESSMENT OF VASCULAR CHANGES IN DEMENTIA

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Vascular dementia (VD) includes a heterogeneous group of disorders in which vascular disease plays a vital role in the development of cognitive impairment. The term „vascular aging" was recently introduced, while the ideal strategy would be to confront the vascular disease before damage to the cerebral vasculature occurs. As neurosonology enables non-invasive assessment of

the eerebrovascular system, it represents a valuable tool for distinction of vascular disease versus normal vascular aging.

Subclinical artherosclerosis involves intima-media thickening (IMT), plaque formation and alterations in arterial mechanics and studies dealing with it are based on B mode ultrasound imaging. IMT measurement in the common carotid artery (CCA) may be used as a surrogate arterosclerotic marker. Increased IMT was shown to have positive correlation with mild decrement in cognitive scores in symptoms free individuals with vascular risk factors. Several observational studies have determined IMT as a possible predictor for future cerebrovascular events: Cardiovascular Health Study (CHS), Rotterdam Study and Atherosclerosis Risk in Communities Study (ARIC). As it appears that mechanical arterial properties, rather than hemodynamics, are affected first with aging, neurosonological methods can be used in the assessment of arterial mechanics of carotid arteries (carotid strain) enabling the screening of unsuccessful vascular aging" and potentially reversible subclinical carotid atherosclerosis.

Intracranial haemodynamic of the aging brain can sucessfully be assessed using Transcranial Doppler Sonography (TCD), functional TCD with various stress tests and TCD detection of cerebral emboli.

Both intracranial and extracranial neurosonological methods are convenient, relatively inexpensive and widely available. This lecture will emphasize their increasing possibilities in detection, follow up and also in screening for early signs of cerebovascular disease.

Neurosonology techniques provide informations necessary to closer determine the relation between cognitive deterioration and vascular risk factors, so that the evolution towards dementia could be prevented or at least postponed.

Free topics (OP -12 / 2)

DEMENTIA AND LEGAL CAPACITY

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The legal capacity is level of judgment and decision-making ability needed to manage one's own affairs and to sign official documents. With some exceptions, the person entitles this right in age of majority. It is acquired without legal procedures, however the annulment of legal capacity requires a juristic process. This resolution may not be final and could be revoked thorough the procedure of reverting legal capacity - fully or partially. Given the increasing number of persons with dementia, they are often subjects of legal expertise concerning their legal capacity. On the other part, emphasis on the civil rights of mentally ill also demands their maximal protection. Therefore such distinctive issue is approached with particular attention.

The approach in determination of legal capacity is more focused on gradation of it's particular aspects instead of existing dual concept: legally capable - legally incapable. The main assumption represents how person with dementia is legally capable and should enjoy all the rights, privileges and obligations as other citizens do. Legal capacity aspects for which person with dementia is going to be deprived, due to protection of one's rights and interests, are determined in legal procedure and then passed over to the guardian decided by court. Partial annulment of legal capacity is measure applied when there is even one existing aspect of preserved legal capability (pension disposition, salary or pension disposition, ability of concluding contract, making testament, concluding marriage, divorce, choosing whereabouts, independent living, right to vote, right to decide course of treatment ect.). This measure is most often in favour of the patient and rarely for protection of other persons and their interests.

Physicians are expected to precisely describe early dementia symptoms which may influence assessment of specific aspects involved in legal capacity (memory loss, impaired task execution, language difficulties, loosing perception of time and space, changes in mood and behaviour, personality alterations, loss of interests and initiative). Towards more accurate determination of legal capacity the psychometric tests are being used. The appliance of these tests must be guided with basic question during evaluation: "For what is or is not he/she capable".

In prediction of possible dementia development, the modern diagnostic procedures are used as help for potentially demented individuals in order to plan own affairs and by oneself determine future guardian. This ensures the maximal respect and protection of rights among persons with dementia in order to independently manage life one step ahead of progressive illness. Finally, it is to be distinguished medical concept of legal capacity which is universal and judicial concept which is restricted by rules of national legal system differing from country to country.

Free topics (OP -12 / 3)

MENTAL COMPETENCE OF PERSONS WITH ALZHEIMER'S DISEASE

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In routine practice elderly, as well as persons suffering from Alzheimer's disease, are relatively rarely subjected to psychiatric forensic expertise, and when one is done it is most often to assess their work capacity, mental competence when making a will, and legal capacity. Only sometimes expertise is done in order to evaluate their competency to stand trial or even more rarely to evaluate their mental competence (sanity).

I have been present at hearings of individuals who, at the time of commitment of the act he/she was indicted for, according to medical documentation had already been suffering from mild to moderate Alzheimer's disease, and at which no formal expert opinion on sanity tempore criminis but only on actual mental competence was asked for. In my opinion it is necessary to consider the need for expertise evaluating mental competence of an individual both at the time of commitment of the act and at the time of the trial, since trials can sometimes last for few years. In practice that means that a person (who is now suffering from Alzheimer's dementia, and at the time of commitment of the act had no symptoms or only mild form of the disease) tempore criminis could have been legally sane or of a reduced capacity. Over time, as it is seen in those with Alzheimer's disease, progression of the disease can lead to lack of adequate understanding/comprehension and thus to reduced mental capacity. In individuals with Alzheimer's disease mental status changes with tendency for deterioration which results in reduction or total loss of the adjudicative competency. Persons can plead insanity for acts they committed while suffering from severe dementia, and almost as a rule they are judged to be incompetent to stand trial.

Expert opinions on adjudicative competency were introduced relatively late and are still rarely used; they were legally accepted only in 2002. One of the flaws is that those opinions are at the moment asked only for defendants and not for witnesses or plaintiffs.

In conclusion I stress that in forming expert opinion on mental capacity tempore criminis of individuals suffering from Alzheimer's disease, their competency to stand trial should also be assessed (even if such evaluation was not asked for by the court) and the court informed of the need for additional expertise on adjudicative competency in order to best protect interests of the defendant and conduct the process lege artis.

Free topics (OP -12 / 4)

STIGMA IN THE ELDERLY: OLD EQUALS DEMENTIA?

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Dementia most frequently affects elderly. Its epidemiology is strongly connected with age and the epidemics of dementia is strongly related to the increase of life-expectancy all over the world. Dementia has an unfavorable outcome leading to decrease in function, quality of life, ability for self-care and independence, increase in illness burden and loss of life. On the other hand are public and expert opinions on dementia different including pesimism and despair in both patient and family members when the diagnose of dementia is disclosed. Part of the stigma of dementia arise from objective facts on dementia, its course and our ability to treat and help both patients and the family. Old age is stigmatised in many different ways, especially in the culture that praise the young and healthy and link old age with inactivity, loss of abilities and illnesses.

The stigma of old age crosses medicine and well-being disciplines and include all areas of our societies and cultures, especially attitudes of people towards other people and values that govern our life. It is not surprising that linking dementia with old age actually increase stigma of already stigmatised conditions. Stigma by itself implies that the worse possible conditions and outcomes are thought of when dementia and old age is in question.

The effect of stigma is actually worsening the reality of both dementia and old age. Dementia is most often mild when diagnosed early. With proper treatment, eduaction and involvment in various programs its effect on quality of life and function is mild and comparable with other illnesses across the life span. Old age is most often active and healthy. With proper attituted and knowledge can become the period of life with a lot of satisfaction and gratifications. It is clear from reasearch and our experiences that stigma can be fought successfully. Ways to dimish the stigma of dementia and old age will be presented. In conclusion the stigma by itself worsens medical conditions and negatively impacts on lives of patients, realtives and experts working with them.

Free topics (OP-12 / 5)

HEALTH CARE OF PSYCHOGERIATRIC PATIENTS

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The WHO defines elderly persons as persons aged 60 - 75, old persons as those aged 75 - 89, and very old as those aged over 90. Ageing is a process spanning the entire lifetime, in which a person experiences numerous biological, psychological and social changes. Old age is a time when people can devote themselves to what they wanted to do in their youth, but did not have enough time for (various hobbies, studies). Numerous stressors are present in the older age. If one has a greater tendency towards adjustment, it is easier to cope with stress. An active lifestyle helps deal with stress better and more easily. The most common stressors are: changes in the appearance, reduced physical capacities, retirement, divorce, death of the spouse, separation from the family. In elderly persons there are numerous physical and cognitive changes that accompany ageing. The most common changes are: reduced organ function, hearing and vision impairment, slower reactions, unstable stance, balance, reduced tactile sensitivity, reduced joint mobility, reduced capacity for recovery after injuries and disease.

The World Health Organization has singled out the following as the most common problems in the elderly: osteporosis, falling, vision and hearing problems, psychological functioning problems, urinary and fecal incontinence, cerebrovascular insult... An important guideline for healthcare is healthcare planning. The assessment of the patient's condition is based on a holistic approach. It is necessary to establish the patient's problems related to: everyday self-management and meeting of basic human needs, capability of developing social relationships and the patient's psychological condition. It is important to include both patients and members of their family in the planning and implementation of healthcare. Once the problems and needs have been established a healthcare plan should be designed. The most common nursing diagnoses in elderly persons are: reduced capacity for self-care, reduced mobility, reduced tolerance for exertion, high risk of falling, high risk of complications due to reduced mobility, pain, insomnia, anxiety, urinary/fecal incontinence, constipation, diarrhea, dehydration, inefficient coping, mourning of the spouse's death, social isolation, disturbed thinking in/with dementia, eating disorder, self-perception disorder in/with hair loss, reduced self-confidence, high risk of abuse, high risk of hypo/hyperthermia, altered sexual pattern, high risk of aspiration, high risk of skin damage, high risk of itching, impaired verbal communication.

Objectives

- Patients will satisfy their needs in line with their capabilities
- Patients will have a positive opinion of themselves
- Patients will recognize health risk factors and will know how to mitigate their effect
- Patients will successfully create social relationships and will not feel isolated
- Patients will successfully adapt to the new situation
- Patients will preserve self-confidence and self-respect

Methods

- Therapeutic communication
- Therapeutic community
- Individual and group psychotherapy
- Progressive muscle relaxation
- Psychological testing
- Working in small groups
- Music therapy
- Literary, art and IT workshop

Upon discharge from hospital patients successfully establish social contacts, and adequately perform activities according to their capabilities. Patients have adopted habits of healthy functioning (exercise, proper diet, regular administration of medications, weight control...).

Free topics (OP -12 / 6)

THE SIGNIFICANCE OF FOUR-LEVEL PROGRAMME OF GERIATRIC HEALTHCARE TARGETED AT PSYCHO-GERIATRIC PATIENTS RESIDING IN ELDERLY NURSING HOMES

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Introduction

The approach to elderly healthcare is comprehensive by nature and allows for the improvement in each and every aspect of healthcare, spanning from prevention, diagnostics and treatment to rehabilitation and (physical, psychical and social) evaluation of functionally disabled elderly.

Given the 17.1 percent share of elderly aged 65 or more (as established by 2004 statistics), the Republic of Croatia is facing the challenge of social development planning and provision of an adequate management and care for the population cluster in reference.

Healthcare standards represent widely enforced and widely adopted standards that define the scope of tasks (actions) pursued within the healthcare frame, as well as the quality of care provided. Healthcare standards define services which experts and professionals are generally expected to deliver in a particular situation; the description of each service is based on the operational field within which the service is rendered and aims at setting the service profile.

As for the Republic of Croatia, the real-life practice witnessed insofar has given indices that, when it comes to primary healthcare settings, standards/models of geriatric healthcare failed to be implemented. Given the fact that a geriatric healthcare standard represents a major tool for elderly care quality improvement, the need for establishing such standards has been imposed. In order to enable the evaluation of geriatric healthcare implementation in elderly nursing homes, preparation of nurse-kept documentation on geriatric patients has become an imperative.

In view of the foregoing, the Referral Centre operating under the wing of the Ministry of Health and Social Welfare Republic of Croatia, in collaboration with the Croatian Nursing Council, Family Medicine Chair of the Medical School University of Zagreb, and the Croatian Gerontological and Geriatric Society operating under the wing of the Croatian Medical Association, had prepared the

Programme of Implementation of Four-Level Geriatric Healthcare to be carried out in elderly nursing homes by virtue of implementation of primary healthcare specifically tailored to serve the needs of geriatric patients.

Pursuant to Article 27, paragraph 1, item 4 of the Nursing Act ("Official Gazette" No 121/03 and 117/08), in December 2009 the Croatian Nursing Council confirmed the adoption of nurse-kept documentation evidencing the geriatric healthcare provided in elderly nursing homes as the standard and the code of conduct of the Croatian Nursing Council.

Norms and standards

Geriatric healthcare standard offers a possibility of professional depiction of healthcare services, and serves as a tool for the improvement of quality of life of both elderly and disabled. Geriatric healthcare standards represent widely enforced and widely adopted standards that define the scope and quality of healthcare. Healthcare standards define services which experts and professionals are generally expected to deliver in a particular situation; the description of these services is based on the operational fields within which they are rendered and aims at setting their profile. Such a standard is featured by both preventive-oriented thinking and preventive-oriented performance.

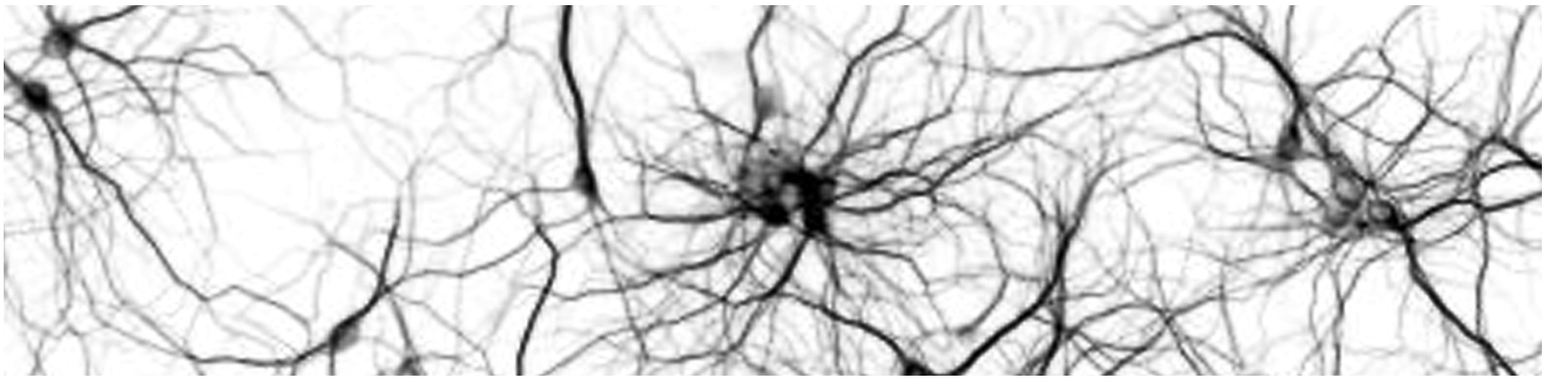
Comprehensive healthcare and its successful implementation call for an adequate documentation as well. Geriatric healthcare-evidencing documentation represents the integration of healthcare standards. In the line of preparation, transparency of the referent documentation had been taken into account, so as to make the documentation functional in an everyday practice.

The documentation displays:

1. documentary function;
2. legal (evidencing) function;
3. informational (data gathering) function; and poses as
4. quality assurance documentation.

Conclusion

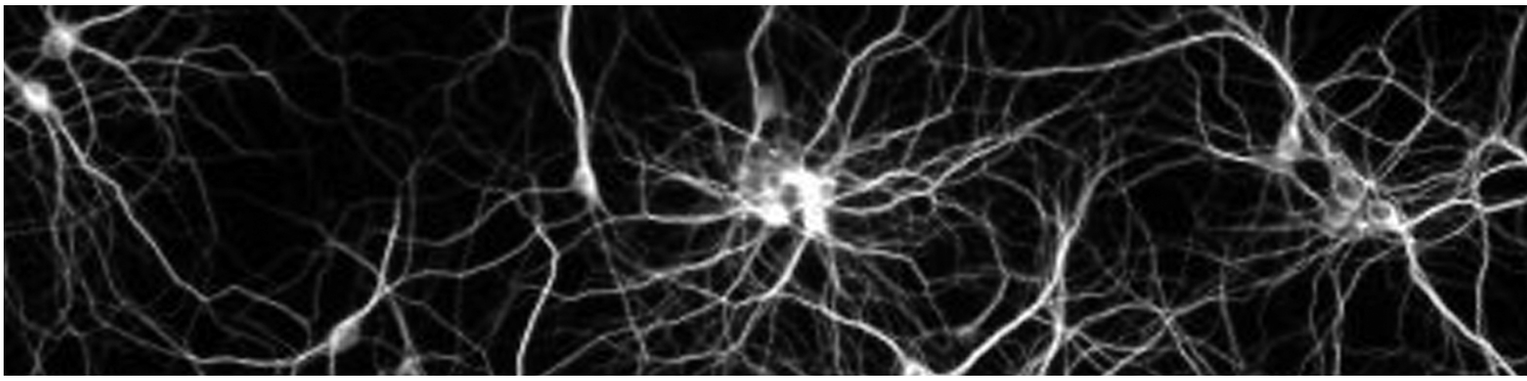
The programme allows for an even representation of a higher number of nurses, dependent on the healthcare needs expressed per geriatric patient residing at an elderly nursing home, as well as for the integration of geriatric healthcare standards in the pertaining documentation. By virtue of the foregoing, the category of insured persons of geriatric age has been established, allowing for the implementation of 4-level geriatric healthcare based on health status and the degree of functional disability of individual category members.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Temeljna istraživanja i neuropatologija u AB
Basic research and neuropathology of AD

PP-1(1-5)



Basic research and neuropathology of AD (PP – 1 / 1)

TRUNCATED TAU INTERACTS WITH PLASMA MEMBRANE AND PROMOTES APPEARANCE OF TAU B-SHEET STRUCTURES

DE ANDA-HERNANDEZ MA[1], Lira-de Leon KI[1], Figueroa-Corona MP[1], Campos-Pena V[2], Meraz-Rios MA[1]

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Alzheimer Disease (AD) is a progressive neurodegenerative disorder and causes dementia in approximately 10% of older individuals. One of the major lesions detected in AD patients are Neurofibrillary Tangles (NFT). In contrast with other tauopathies, the Tau protein in AD does not present any particular mutation that favour the neurodegenerative process during disease progression, suggesting that other important events may contribute in Tau abnormal aggregation. According to many authors, Tau truncation is an elementary event during AD evolution; and the lost of the amino and carboxyl terminus could contribute to the formation of hyperphosphorylated forms of Tau, as well as NFT generation and mithocondrial disturbance. In order to evaluate the interaction of the human truncated Tau protein with the plasma membrane, and its participation in NFT generation, we expressed a truncated form of the protein, from the 151 to the 391 aminoacid in a neuroblastoma cell line. The results showed, by using confocal microscopy, that this exogenous protein promotes the enrichment of β-sheet structures. In addition, we observed an abnormal localization of this truncated form at the plasma membrane. We also demonstrate that the exogenous truncated Tau interact with Fyn kinase. Our data suggest that the abnormal localization of Tau, could participate in the Tau aggregation pathway during AD.

Basic research and neuropathology of AD (PP - 1 / 2)

FOLLOW UP OF HIPPOCAMPAL TAU PROTEIN CHANGES IN RAT MODEL OF SPORADIC ALZHEIMER'S DISEASE

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Objectives

Neurofibrillar tangles associated with tau protein hyperphosphorylation induced by glycogen synthase kinase 3 (GSK3) are one of the major hallmarks of sporadic Alzheimer's disease (sAD). The appearance and time course of tau protein hyperphosphorylation, impossible to investigate in humans, can be explored in experimental sAD model like streptozotocin-intracerebroventricularly (STZ-icv) treated rat. We aimed to compare early (two weeks) and late (nine months) hippocampal tau protein and GSK3 changes following the experimental sAD induction.

Methods

Three month old male Wistar rats were injected with STZ (3mg/kg) bilaterally into the lateral ventricles while control animals received vehicle only. Cognitive functions were tested by Morris Water Maze Swimming Test before sacrifice, two weeks and nine months after STZ-icv treatment, respectively. Protein expression of total tau, phospho-tau (p-tau), phospho-GSK3α and β (pGSK3α and pGSK3β) and total GSK3 was measured by SDS-PAGE electrophoresis, followed by Western blot analysis in hippocampus (HPC), and data analysed by Mann-Whitney U test ($p<0,05$).

Results

Two weeks following the STZ-icv treatment only p-tau protein and pGSK3β expression was found significantly decreased (-25.6% and -40%, respectively), while after nine months, total tau protein and pGSK3β expression was found decreased (-31.8% and -45.1%, respectively) and total GSK3β expression increased (+49.9%). These changes were associated with decreased p/total tau ratio after two weeks, which after nine months was found highly increased (+51.3%). Contrary to that, p/total GSK3β ratio has appeared decreased already after two weeks (-41.7%) and continued to decrease to -62.6% after nine months. Cognitive deficit found after two weeks mildly deteriorated nine months after STZ-icv application.

Conclusion

Decreased p/total tau protein ratio in relation to increased activity of GSK3β, indirectly assessed by decreased p/total GSK3 β ratio, suggests that acute changes of tau protein phosphorylation are mediated by kinase/phosphatase imbalance other than GSK3β, while in long term increased p/total tau ratio seems to be in line with the increased activity of GSK3β found up to nine months after STZ-icv induced experimental sAD presented here and in our previous research. Acknowledgement: Supported by MZOŠ (108-1080003-0020) and DAAD projects.

Basic research and neuropathology of AD (PP – 1 / 3)

INTRACELLULAR PAIRED HELICAL CORE AND ASSOCIATED TO NEURONAL MEMBRANE ACTS AS INDUCERS AND PROMOTERS FOR TAU AGGREGATION

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Tauopathies are a group of neurodegenerative diseases characterized by aggregation of the microtubule-associated protein Tau into filamentous structures. Because Alzheimer´s disease (AD) is the most common of the Tauopathies, the studies of events leading the pathological process of Tau aggregation are of great interest. In AD Tau protein aggregates abnormally as Neurofibrillary tangles (NFTs) and correlates with cognitive impairment. However, Tau in physiological conditions polymerizes poorly because it is a highly soluble protein with a poor secondary structure. Recent studies confirmed that Tau aggregates displaying a β-sheet structure. This conformational change is possible because Tau contains two motifs which have a regional trend to form β-sheet structures into the microtubule-binding domain. This region is also known as the paired helical filament (PHF) core. In the present work, we express PHFcore in SH-SY5Y cells in two ways: soluble (sPHF) and with neuronal membrane localization (mPHF), to evaluate the differences between a soluble phenomenon and the membrane substrate for Tau aggregation. The results showed that the expression of both constructs decreased endogenous Tau levels, probably as a defense mechanism in order to eliminate the Tau aggregates. On the other hand, when protein degradation is blocked, the Tau levels are restored and the Tau aggregates are observed with thiazine red staining and also can be extracted with sarcosyl. The filaments observed in both cases are short straight. Dependent of wich protein degradation pathway is blocked, the sPHF or mPHF proteins, are processed differently. These data suggest that Tau aggregation occurs with the presence of sPHF or mPHF, but mPHF is most efficient in this process.

Basic research and neuropathology of AD (PP – 1 / 4)

TAU AGGREGATION INDUCED BY PLANAR AROMATIC DYES IN SH-SY5Y CELLS

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Tau filaments are the hallmark of Alzheimer´s disease (AD). However, the pathway through Tau protein, acquires a rich β-sheet structure and polymerize into filaments is not clear. Planar aromatic dyes Congo Red (CR), Thiazine Red (TR), and Thioflavine S (TS) are capable of inducing Tau fibrillization in vitro. In addition, only CR also is an inducer of aggregation in non-neuronal cells. In order to establish a mechanism to study these phenomena, we developed a neuronal model to study the Tau aggregation induced by these dyes. SH-SY5Y cells were treated with each one of these dye at different concentrations (5-100 μM) for seven day. CR treatment showed no differences with the different concentration tested. On the other hand, at 15 μM and higher concentrations, of TS and TR, showed a slightly but detectable increase of Tau polymerization, therefore we decided to analyze the cells by immunocytochemistry, with a Tau antibody to visualize the filament structures. All treatments with the planar dyes showed co-localization between the respective dye and Tau into the cytoplasm of the SH-SY5Y cells. In addition we evaluate the formation of insoluble aggregates of Tau through extractions with sarcosyl and Western blot analysis. Densitometric analysis showed an increase of insoluble Tau levels observed in the pellet of SH-SY5Y cells, treated with CR or TS, but not with TR. When the cells were treated with 60 μM of dye, a filtration assay was prepared, and the results showed a positive signal to Tau antibody compared with n signal in untreated SH-SY5Y cells. Interestingly, the morphology of the filaments observed is particular to each dye; for example, the filaments formed with CR are robust and amorphous, TR filaments are short straight and interestingly TS filaments are paired helical and long length as observed in AD. These results showed an in vivo Tau aggregation of the stabilization of Tau filaments with planar aromatic dyes.

Basic research and neuropathology of AD (PP - 1 / 5)

MODULATION OF GAMMA-SECRETASE ACTIVITY BY MULTIPLE ENZYME SUBSTRATE AND ENZYME INHIBITOR INTERACTIONS; IMPLICATIONS IN PATHOGENESIS OF ALZHEIMER'S DISEASE

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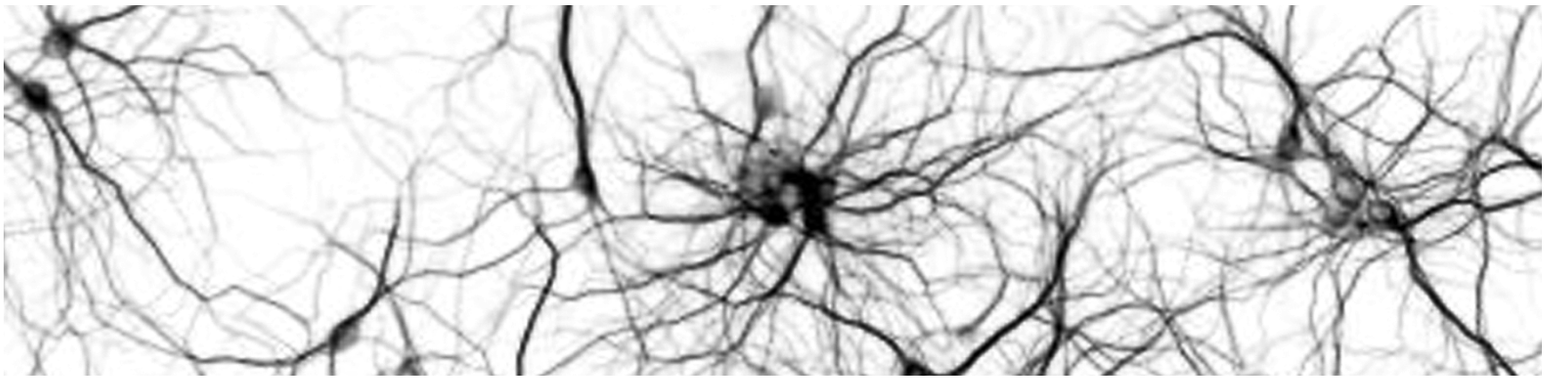
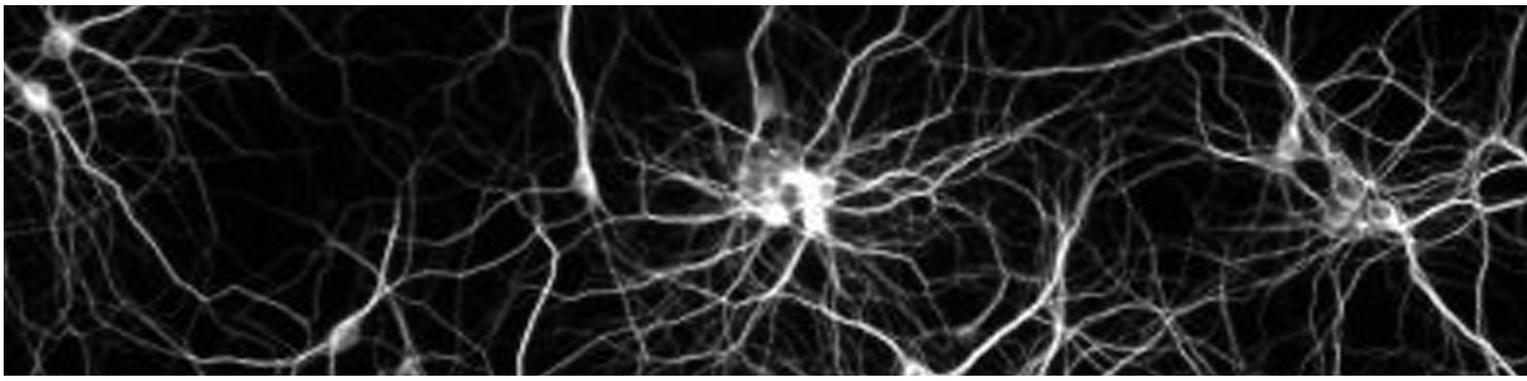
Alzheimer's disease (AD) is a neurodegenerative disorder with no effective cure and unknown molecular mechanism. A large part of the current research and drug design efforts are centered on; i) an intramembrane protease gamma-secretase; ii) its substrate, 99 amino acids long transmembrane helix, C99; iii) its proteolytic product, hydrophobic amyloid-beta peptides, Aβ. In this study we map the toxic events leading to AD by tracing the catalytic cycle of gamma-secretase from the initial enzyme-substrate interaction to the final product release step. A number of independent lines of evidence show that gamma-secretase can simultaneously bind, cleave, and process multiple C99 molecules to Aβ-oligomers. During the catalysis the nascent Aβ-oligomers undergo a sequence of dynamic structural changes that influence the type of produced Aβ-peptides. Saturation of gamma-secretase with is C99 substrate leads to two potentially toxic events: an increase in Aβ42/Aβ40 ratio and increased production of longer more hydrophobic Aβ-peptides. Similar changes in Aβ production can be observed with two gamma secretase mutants that lead to an early onset of the disease, ΔE9 and G384A. NotchΔE substrate, and small molecule inhibitor DAPT, can activate and inhibit gamma secretase by competing with C99 substrate for different binding sites. The competition can be affected by C99 dimerization. The activation by DAPT is observed at low substrate concentration as a result of an increase in the enzyme kinetic affinity for its substrate (kcat/Km effect), i.e. DAPT can "fill-in" for the sub-saturating substrate by acting as a surrogate-substrate. At the saturating concentration DAPT behaves as a non-competitive inhibitor. G384A mutation will completely abolish activation by DAPT and decrease its inhibition potency by more than 100 fold. ΔE9 mutation leads to twenty-fold decrease in binding affinity for DAPT activation and inhibition sites. The two mutants show almost identical twenty-fold decrease in binding affinity for the active site inhibitor L-685,458. The presented results offer novel insights in pathogenesis of AD and development of therapeutics.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Rana dijagnostika AB
Early diagnostics of AD

PP-2 (1-2)



Early diagnostics of AD (PP- 2 / 1)

BRAINSTEM RAPHE LESION IN PATIENTS WITH ALZHEIMER'S DISEASE

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The current clinical criteria, as well as the histopathological classification for diagnosis of Alzheimer's Disease (AD) were focused mostly on progression of AD neurofibrillary degeneration in cortex, first hipocampal and entorhinal, then high-order cognitive neocortex.1

However, recent neuropathological studies 2,3,4 showed early involvement of brainstem, particularly the dorsal raphe nuclei in the pathogenesis of AD.

Transcranial sonography (TCS) was introduced 20 years ago for evaluation of intracerebral hemodynamics.Introduction of B-mode in the last decade provides more precise information of brain parenchyma as well. Usefulness of TCS in distinguishing some basal ganglia disorders is well documented.

Echogenicity of the midbrain line mesured by means of TCS correlate with the integrity of basal limbic system and raphe nuclei (RN).

Recent (TCS) studies showed that disruption of echogenic midbrain line might represent functional marker for the development of depression 5.

Patients and Methods

20 subjects were included in the study: 10 patients with AD (mean age 68.,0 ±7,8) ,10 age-matched patients with MMSE higher than 26 were in the control group (mean age 65.,4 ±6,5), All of them without Major depression episode in clinical history, where studied using TCS. All the patients were treated at the University Hospital "Sestre milosrdnice" in the Department of Neurology, Zagreb, Croatia. Informed consent was obtained before entering the study. The psychiatric diagnosis of MDD and questionnaire about suicidal ideation was made according to the diagnostic criteria of DSM-IV. Severity of the disease was measured according mini mental state examination (MMSE). Only patients with temporal acoustic bone windows that enabled the identification of structures within the mesencephalic brainstem were included.

Transcranial sonography

TCS was performed freehandedly with ultrasound system (Alpha 10; Aloka, Tokyo, Japan) equipped with 2.5 MHz transducer. The measurement was done two times by two independent physicians

(R.B., M.B) blinded on the results of the other and clinical data. The insonation was done throughout both temporal "bone window" on intact skull. Penetration depth was 14 cm and gain image was adopted individually. The echogenicity of the pontomesencephalic nuclei raphe was rated semiquantitatively on a three-point scale with red nucleus as a reference point: 1= RN not visible, 2 = slighty echogenic/interrupted RN, 3 = normal RN echogenicity (Becker et al., 1995). RN echogenicity was regarded as reduced only if the findings of both physicians agreed.

Results

Results showed significantly lower RN echogenicity in patients with Alzheimer's Disease (mean = 1-4 compare to mean score of ehogenicity in control group = 2-7), without major depresive disorder ($p < 0\text{-}01$). Reduced raphe echogenicity was found in 7 of 10 (70%) of the patients with AD but only in 3 of 10 (30%) controls.

Conclusion

Our pilot study showed significantly lower RN echogenicity in patients with AD, which confirmed early involvement of the raphe nuclei in AD degenerative process.

Early diagnostics of AD (PP – 2 / 2)

NEUROPSYCHOLOGICAL FUNCTIONING IN ALZHEIMER DISEASE

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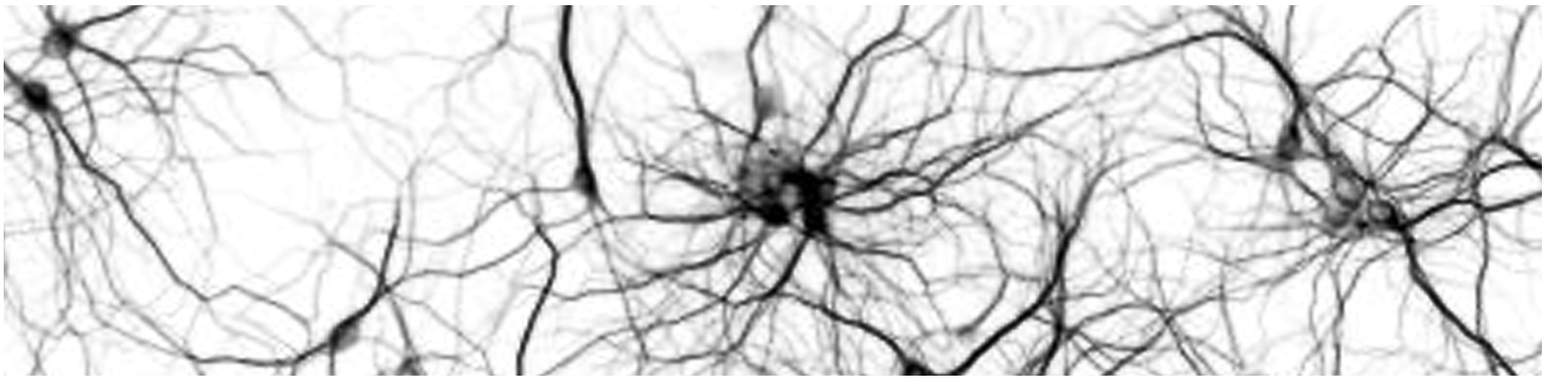
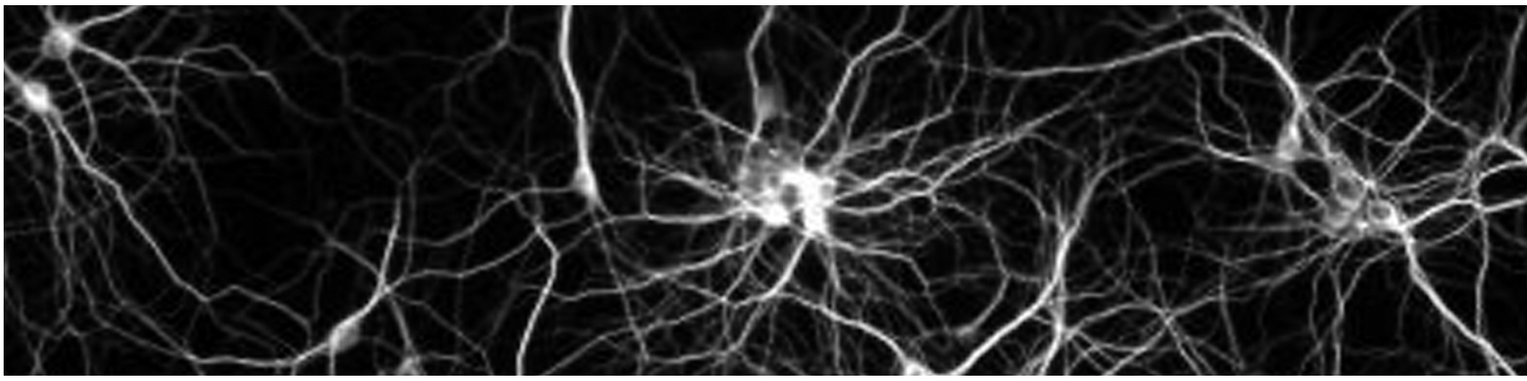
Diagnostic criteria for the clinical diagnosis of probable AD requires that the dementia be 1) established by clinical examination, 2) documented by the MMSE or some similar examination, and 3) confirmed by neuropsychological tests. There must be a deficit in two or more areas of cognition, one of which must be memory. Furthermore, progressive worsening of these functions (e.g. memory, language, praxis, visual perception, attention and problem solving) must be demonstrated. A comprehensive neuropsychological evaluation of patients with suspected dementia should provide a cognitive profile that describes the individuals' strengths and weaknesses. The confirmation of dementia using neuropsychological tests is particularly important in cases of mild dementia. A typical neuropsychological profile for a person with mild to moderate AD includes recent memory impairment (both verbal and nonverbal), a reduction in overall level of intellectual functioning (including deficits in judgment and abstract reasoning), a lower performance IQ than verbal IQ, constructional problems, reduction in verbal fluency, and variable language deficits with naming difficulties. Impaired intellectual functioning and the symptom triad of memory loss, dysnomia and visuospatial deficits have been suggested as the hallmark of AD, although patients may exhibit only one or two of these symptoms in the early stages of the disorder.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Epidemiologija i čimbenici rizika AB
Epidemiology and risk factors for AD

PP-3 (1-2)



Epidemiology and risk factors for AD (PP – 3 / 1)

MOLECULAR BASIS OF ALZHEIMER'S DISEASE: ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE AND INFLAMMATORY CYTOKINES

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Aim

Alzheimer's disease (AD) is a multifactorial and polygenetic neurodegenerative disease. Its etiology is unclear but could be the result of interaction between genetic and environmental factors. The early stage of AD is related to the degeneration of cholinergic neurons, while the alterations in noradrenergic neurons occur with the progression of disease. Noradrenalin is a neurotransmitter with possible neuroprotective role throughout its effect on the expression of inflammatory mediators. Dopamine beta-hydroxylase (DBH) being a key enzyme in the synthesis of noradrenalin could modulate its neuroprotective role. Neuroinflammation is also an important factor in the etiology of AD, related to onset and progression of disease. The aim of the present study was to determine plasma DBH activity and DBH, inflammatory cytokines (IL-1a, IL-1b, IL-6, IL-10, TNF-a) and ApoE gene polymorphisms in patients with AD and elderly healthy controls.

Methods

The study included 207 patients with AD and 90 healthy controls. Plasma DBH activity was determined by a photometric method and gene polymorphisms using TaqMan Real-time allelic discrimination technique after extraction of DNA from whole blood with salting out procedure.

Results

A decrease in plasma DBH activity was found in AD patients compared to controls or between AD patients in different stages of the disease that were independent of the genetic variants in DBH gene. A significant difference was found in allele frequencies of the IL-10 gene between AD and controls, with higher frequency of the T allele with lower IL-10 expression ("risk" allele) in AD. There was no relationship between genetic variants of other cytokines and AD. The results showed a higher frequency of carriers with E4 allele of the ApoE gene among patients with AD. The higher frequency of carriers with simultaneously E4 allele

in ApoE gene and T allele in IL-10 gene was found in patients with AD than in controls.

Conclusions

Decreased activity of DBH suggests lower noradrenalin synthesis and its diminished protective role in the development and progress of AD. The results propose that the synergistic effect between genetic variants in anti-inflammatory cytokine IL-10 and ApoE genes could be the markers for higher risk of AD development.

Epidemiology and risk factors for AD (PP – 3 / 2)

POST-TRAUMATIC STRESS DISORDER AS A POTENTIAL PREDICTOR FOR ALZHEIMER'S DISEASE

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There is some evidence that PTSD may be associated with reduced cognitive function and increased risk. No study has yet investigated if PTSD increases the risk of developing dementia. Stress has major impact upon neurodegenerative diseases. Patient J-K born on 1951., from Bosnia and Herzegovina, VSS. This patient was first seen by psychiatrist in our hospital at December 2009 accompanied with her relative which she visited couple days before. In April 2009, patient was seen by psychiatrist in her home town in Bosnia and she was diagnosed as medium depressive episode without further examination and paroxetin 20 mg was prescribed. In last two years patient suffers from significant memory lost and forgetness. Patient is in good physical health overall, there are no significient data in general family anamnesis and particularly no cases of Alzheimer's dementia. Patient is married and has two adult children. During the war in Bosnia she developed Posttraumatic Stress Disorder experiencing multiple psychicotraumatizations, torture and harassment. She never seeked for any professional help. All tests we do supports diagnosis of Alzheimer's Dementia with early onset. In further text we discuss about possible relationship between Alzheimer's Dementia and chronic nottreated PTSP. Our case and data were compared with data in available literature.

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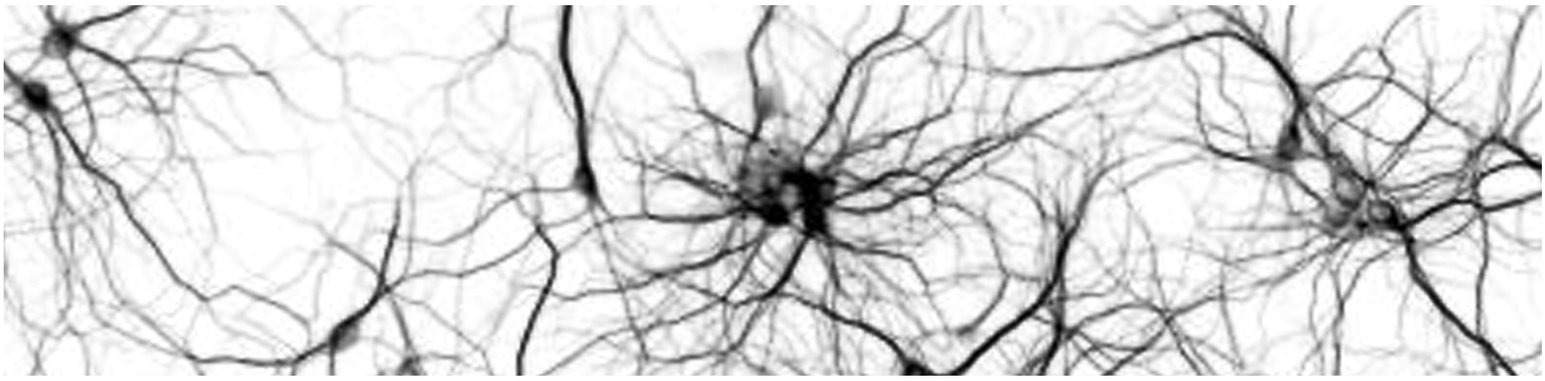
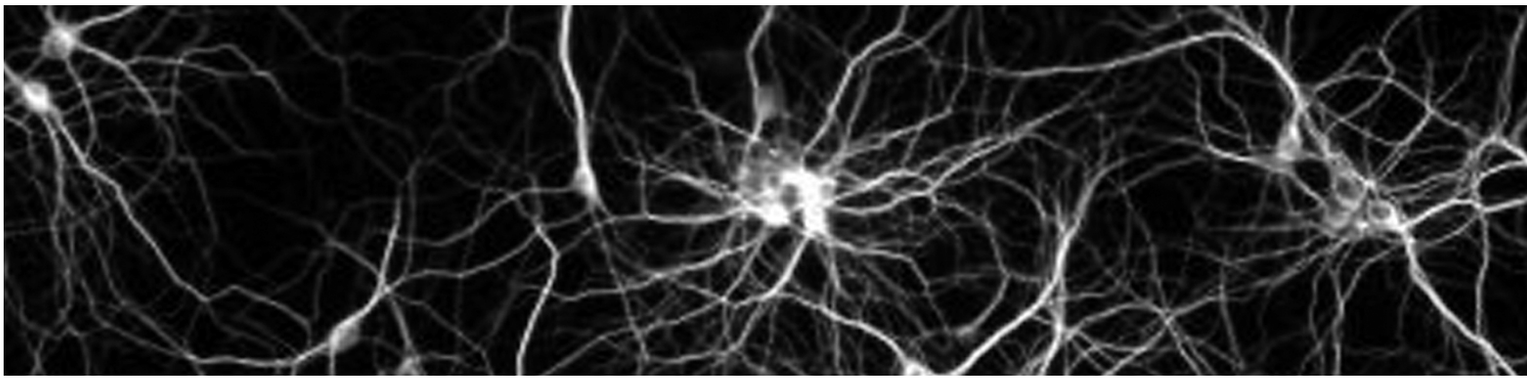


Sažeci poster prezentacija
Abstracts of Poster Presentations

Klinička istraživanja u AB
Clinical research in AD

PP-4 (1-4)



Clinical research in AD (PP – 4 / 1)

BENEFIT OF IVIG IN ALZHEIMER'S DISEASE

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Background

Institute of Immunology, inc. is the only company in Croatia and region producing polyvalent intravenous immune globulin (IVIG) from plasma collected only on Croatian territory with priority to cover national needs and ensure regional self-sufficiency program in blood products.

In recent years, polyvalent intravenous immune globulin (IVIG) usage has grown significantly in: neurology, rheumatology, nephrology, dermatology, oncology and infectious diseases, as well as allergy and immunology.

Highlights

Although IVIG is not currently approved to treat Alzheimer's disease, 35 academic institutions in conjunction with the NIH and the *Alzheimer's Disease Cooperative Study Group* have engaged in a Phase III clinical trial to try and confirm the encouraging results using IVIG that have been reported in the Phase I and Phase II trials. In the earlier trials it was shown that patients tolerated the IVIG therapy with minimal adverse reactions and all patients had stabilization of their cognitive abilities with many of them demonstrating a significant improvement in cognitive ability over the course of the six months of IVIG treatment (*American Outcomes Management, 1/2010*)

The risk of developing Alzheimer's Disease and Related Disorders (ADRD) may be reduced by about 40 percent in patients previously treated with IVIG (*10th International Hong Kong/Springfield Pan-Asian Symposium on Advances in Alzheimer Therapy; 2008*)

Benefit of IVIG

It has been discovered that IVIG, which is derived from human blood, contains antibodies that bind to the beta amyloid protein. Results from a recently presented clinical study show that IVIG appears to promote the clearance of beta amyloid from the brain and block its toxic effects on brain cells resulting in a stabilization or improvement in the global outcomes and activities of daily living of patients with Alzheimer's disease.

IVIG demand on the global market

The volume of IVIG is forecast to grow from about 82.3 metric tons in 2008 to some IVIG demands in Croatia 107.9 tons by 2012, corresponding to an annual growth rate of 7% – the rate observed in the past ten years and to 151.6 metric tons in 2015 (annual growth rate of 12 %).

Beyond 2012, the demand of IVIG will depend upon the results of the Alzheimer's disease trials and the possible approval of IVIG for this new indication.

Calculate on the base of world consumption of IVIG the quantity of IVIG is forecast to grow from about 75 kg in 2009 to cca 92 kg by 2012, corresponding to an annual growth rate of 7% – and consequently to 130 kg by 2015.

Conclusion

In order to process this additional quantity of IVIG it is necessary to collect and fractionate 30 000 L of plasma in 2010 and 40 000 L by 2015.

It means that quantity of collected plasma and fractionation capacity will have to increase accordingly.

Clinical research in AD (PP – 4 / 2)

INFORMED CONSENT COMPETENCY OF PERSONS WITH ALZHEIMER'S DEMENTIA

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The proportion of elderly population is in constant increase worldwide. About 5 % of persons over the age of 65 and about 50 % over the age of 95 have Alzheimer's dementia (AD). This brings out the need to perform more clinical studies in the said field. Unfortunately, scientific progress in the prevention and treatment of dementia has been disappointingly modest.

Informed consent requires a voluntary and informed decision by a competent person. Researchers have shown that even mild-to moderate Alzheimer's disease has significant impact on treatment consent capacity. Obtaining a legitimate informed consent from patients whose decision-making capacity is impaired, yet keeping in mind the ethical dilemmas, legal rights, and benefits of a potential participant, is the key problem.

The public perception of the research enterprise as beneficent has recently been shaken by reports of investigator-pharmaceutical financial alliances that appear to threaten scientific objectivity. Therefore, before enrolment in the clinical trial and according to our clinical trial experience, there is a tendency to evaluate the consent competency of an AD patient by an independent medical professional (neurologist, psychiatrist of psychologist). The independent professional would not participate in the further research procedures, ensuring objectivity and avoiding possible conflict of interests.

The empirical literature includes a number of instruments designed to evaluate participants' understanding of consent forms and/or 1 or more components of capacity to consent to research. Most of the published measures focus exclusively on the understanding of disclosed material; only two of the published measures, the MacArthur Competence Assessment Tool for Clinical Research (MacCAT-CR) and the Informed Consent Survey, are designed to evaluate all four commonly recognized dimensions of capacity to consent to research (understanding, appreciation, reasoning, and expression of a choice).

Assessment of consent competency of persons with AD by the independent professional ensures the patient's autonomy, safeguards his rights, and protects the integrity of the clinician-scientist.

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Clinical research in AD (PP – 4 / 3)

PSYCHO PHARMACOTHERAPY IN PATIENTS WITH DEMENTIA

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Aim

Review of pharmacotherapy in patients suffer from Alzheimer's and Vascular Dementia, hospitalized in Psychiatric hospital Lopača in last five years.

Method

Medical records of 111 patients hospitalized from 2005 until 2010 are included in this review, with intention to collect and statistically analyze data of the most common psychopharmacs used in treatment of psychiatric symptoms of dementia.

Results

In observed sample 78% of patients were diagnosed as Alzheimer's dementia, while 22% of them were diagnosed as Vascular dementia. Results have shown that dementia is state that requires psychiatric as well as nursing home care. In our sample antipsychotics and anxiolitics were used in doses dependable of progress of dementia and symptoms associated with disease. Antipsychotics were used in 92% of patients, of which the commonly used drug was Risperidone (41%), while 44% of patients were treated with anxiolitic, oxazepam (34%) as a commonly used drug. Considering the high age of patients doses of medications were low.

Conclusion

Alzheimer's disease is the most common form of dementia among older people. Reason for the use of antipsychotic drugs in AD is partially attributed to the superficial phenomenological similarities of delusions, hallucinations and other disruptive behaviours occurring in AD to the symptoms of psychosis. The mayor problem in use of antipsychotics is the mechanism of typical antipsychotic in frequent emergences of pseudoparkinsonian rigidity, tremor and bradykinesia, which leads to the use of second generation antipsychotics. The efficacy and tolerability of these drugs in AD patients with psychosis and disruptive behaviour, indicates that they will be increasingly used to manage patient problems despite their higher cost.

Clinical research in AD (PP – 4 / 4)

COMPARISON OF THE COGNITIVE STATUS OF PATIENTS WITH ALZHEIMER'S TYPE DEMENTIA AND OTHER TYPES OF DEMENTIA AND HEALTHY ELDERLY PERSONS

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Aim

To investigate differences in cognitive functioning in patients with dementia (Alzheimer type dementia - DAT, vascular dementia and others) and healthy elderly persons.

Method

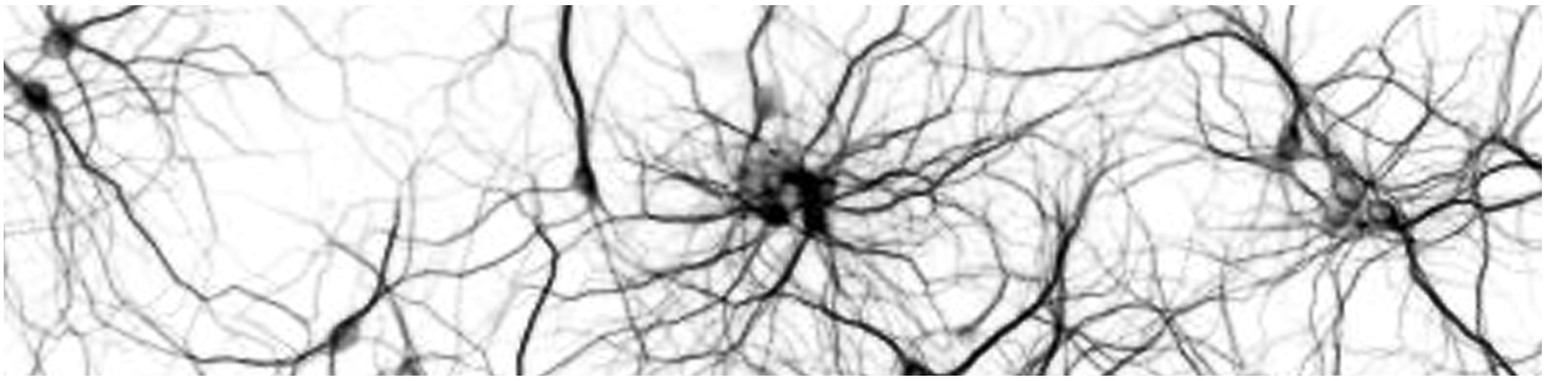
Sixty-three participants were included in this preliminary study, 47 patients and 16 healthy elderly persons. Among the group of patients examined, 21 were with DAT, 7 with vascular type dementia and 19 with other types of dementia. The patients were tested in the Psychiatric Hospital Lopača, Psychiatric Hospital Rab and General Hospital Požega. The average age was 73.40 years (SD=8.37), age range 58 to 89, and average age of healthy persons was 71.45 years (SD=9.76), age range 51 to 86. Mattis' Dementia Rating Scale (1988) was used for evaluation of the participants' cognitive status. It included 5 sub-scales intended to measure attention, initiation/perseveration, constructive abilities, reasoning and memory.

Results

The results of one-way analyses of variance showed significant differences in all aspects of cognitive functioning between healthy elderly persons and patients with dementia. Patients with various types of dementia did not differ in cognitive abilities. It is interesting that patients with vascular type of dementia did not significantly differ in attention and visual-constructive abilities compared to healthy elderly persons. Based on these results, can we speculate about the various patterns of cognitive decline in patients with different types of dementia?

Conclusion

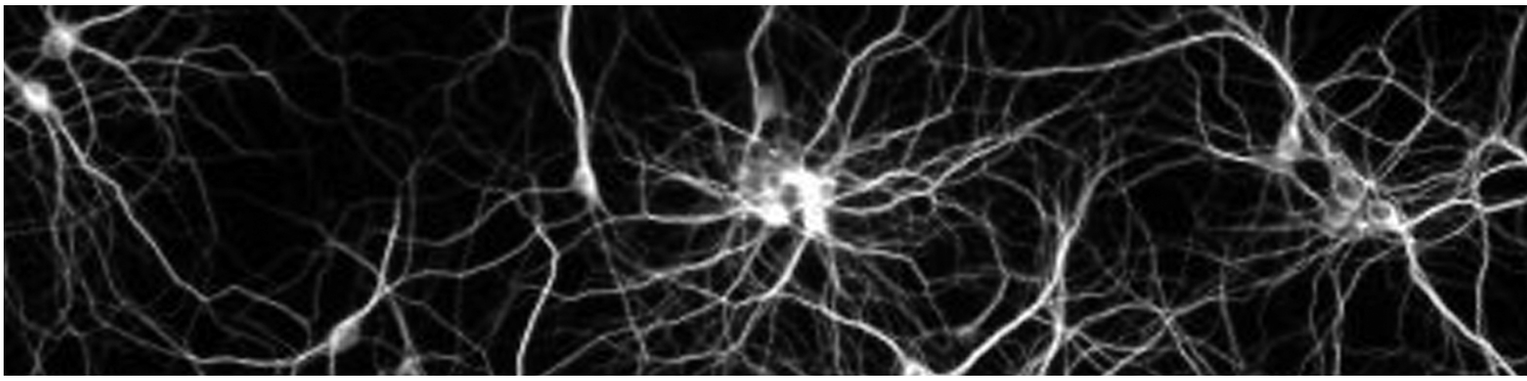
DRS as a diagnostic instrument successfully differentiate between persons with cognitive decline due to the aging process and those with pathological processes underlying their cognitive impairment. However, the results of this preliminary study must be interpreted with caution because of the relatively small number of patients in some groups and the questionable accuracy of diagnosis.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Klinička obilježja AB i prikazi bolesnika
Clinical characteristics of AD and case reports

PP-5 (1)



Clinical characteristics of AD and case reports (PP – 5 / 1)

DEPRESSION – THE FIRST SIGH OF MB. ALZHEIMER

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A 77-year-old female patient experienced first mental disorders six years ago when she complained of lack of interest and will therefore visited a psychiatrist. Due to depressive sympthomatology, an antidepressant drug was introduced to which the patient only showed discrete response.

Methods

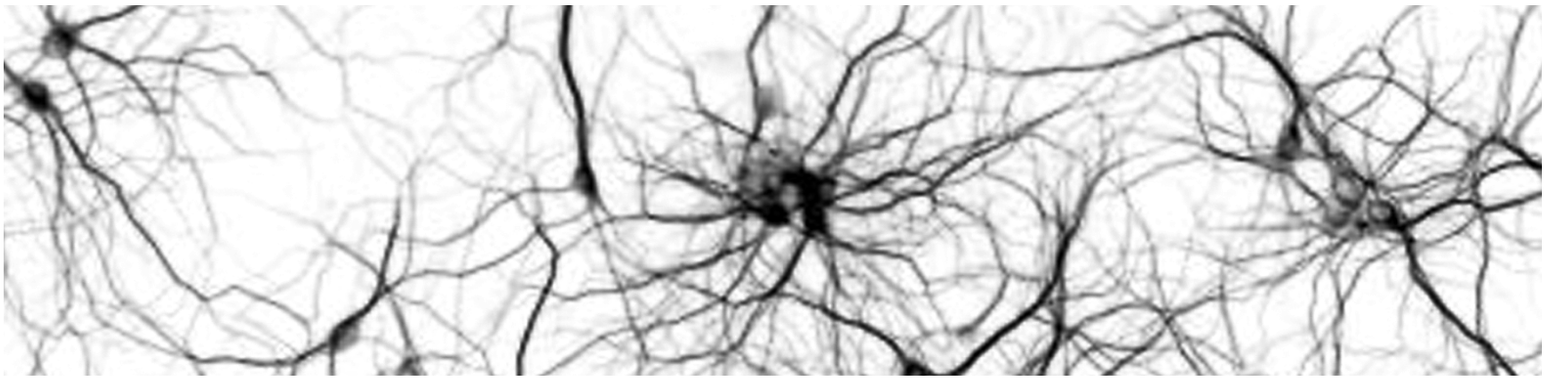
Since a considerable reduction of symptoms was not established after three months of regular medication, both psychological testing and neurological examinations were carried out. Psychodiagnostic assessment revealed mnestic activity disturbances and the beginning of organic changes, while neurological examination established the diagnosis of Mb. Alzheimer.

Results

Donepezil titrated up to 7,5 mg was introduced and the patient showed mild improvements in her psychological state for the following 13 months when a relapse occurred. For the next 48 months the course of illness was slower and accompanied by medication titration.

Conclusion

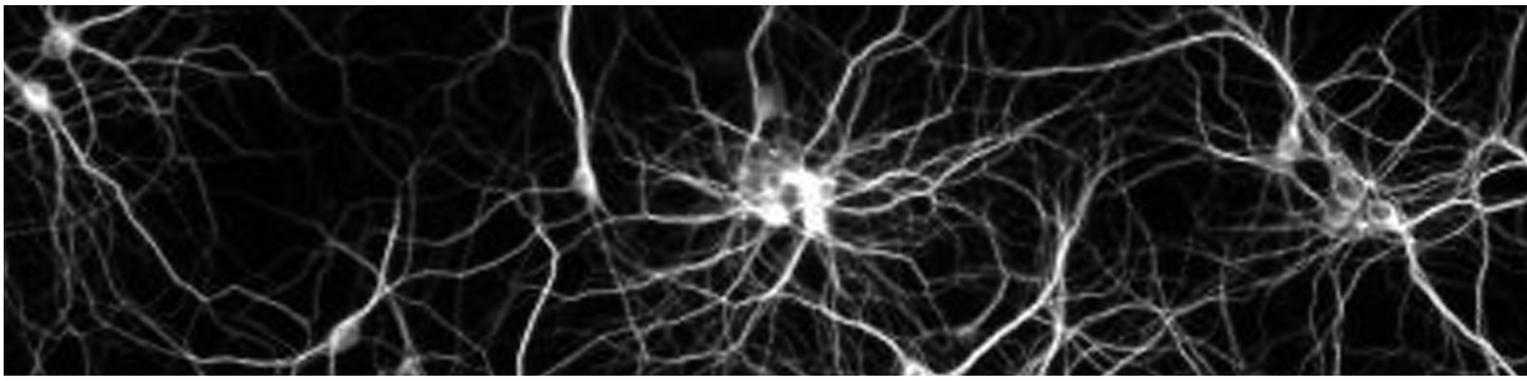
During the lifelong treatment all the symptoms of the stated disease have developed. The acute phase included psychomotor agitation, appetite increase and disorientation. The medications introduced insured a slower course of basis illness, which is, however, chronic and progressive.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Farmakoterapija demencija
Pharmacotherapy of dementia

PP-6 (1-2)



Pharmacotherapy of dementia (PP - 6 / 1)

GASTROINTESTINAL SIDE EFFECTS DURING THERAPY

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Aim

Aim is to present a case of a patient with Alzheimer's dementia who had gastrointestinal side effects during treatment.

Case report

Patient, 74 years old, was hospitalized in Psychiatric Hospital Vrapče, University Department, after getting out of the house through window (ground floor). Previously, he was not in psychiatric treatment. According to heteroanamnestic data obtained from members of his family, during the past one year patient became disoriented, had problems with memory and concentration that gradually progressed, and in the end was not able to function at home without help from member of the family. On the day of admission to the Hospital he fell out from the window and got injured (without fractures). The patient was diagnosed with dementia, Alzheimer's type. During hospital treatment the patient tried to exit the room through window on several occasions. When asked about that he repeatedly stated that he thought he was getting out through the door. Also, it was noticed that the patient had to be reminded to swallow the food while eating. After admission, the therapy with promazine in daily dosage of 200 mg and zolpidem 10 mg in the evening was initiated and the patient gradually became more relaxed and his sleeping improved. Also, therapy with fluvoxamine (50 mg daily) and donepezil (10 mg daily) was initiated. After five days of therapy with fluvoxamine the patient had nausea and vomited. He reported nausea mostly in the morning. It was not clear which medication is responsible for such development and it was decided to discontinue therapy with antidepressant. On the second day after discontinuation of fluvoxamine the patient stopped vomiting and did not report nausea any longer. Since the patient had symptoms of anxiety and depressed mood, tianeptine was introduced in therapy (25 mg daily). Daily dosage of promazine was reduced to 50 mg in the evening, and therapy with zolpidem was gradually discontinued. Therapy with donepezil was continued throughout hospital treatment that last three weeks. Patient became more relaxed, his

mood improved, as well as sleeping, and his behaviour, also.

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Pharmacotherapy of dementia (PP – 6 / 2)

PATIENT WITH ALZHEIMER'S DEMENTIA AND DEPRESSION

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Aim

Aim is to report about treatment of a patient with Alzheimer's dementia who attempted suicide.

Case report

Patient, 70 years old, was hospitalized after attempt of suicide. The patient confirmed having problems with memory and concentration for the past three years, which became problem in her daily functioning. She felt like a burden to her environment and spent most of her time at home. She tried to paint a wall in the house, but she fell and got injured. That worsened her feeling of uselessness, she became suicidal and attempted suicide with medications. She said that she took about 20 tablets of oxazepam and after that woke up in the hospital. Also, several days before that she forgot to turn off the water in the kitchen, which caused flood in the kitchen, while she was listening to the radio on the balcony. She explained that to her daughter who was angry at her, and the patient concluded that her environment thought that she was useless. After admission to the Psychiatric Hospital Vrapče, University Department, therapy with tianeptine was initiated in daily dosage of 25 mg, along with lorazepam (2 mg in the evening). Lorazepam was replaced by zolpidem (5 mg in the evening) after one week of treatment. In the beginning of treatment the patient was depressed, passive, had insomnia, mostly isolated herself from other patients and communicated very little. After diagnostic procedure was completed she was diagnosed with dementia, Alzheimer's type, and therapy with donepezil was initiated (10 mg in the evening). During first several days of therapy she had nausea and decreased appetite, which disappeared after that. After discharge from hospital outpatient treatment was initiated. The patient is taking the prescribed therapy and she joined the club of retired persons.

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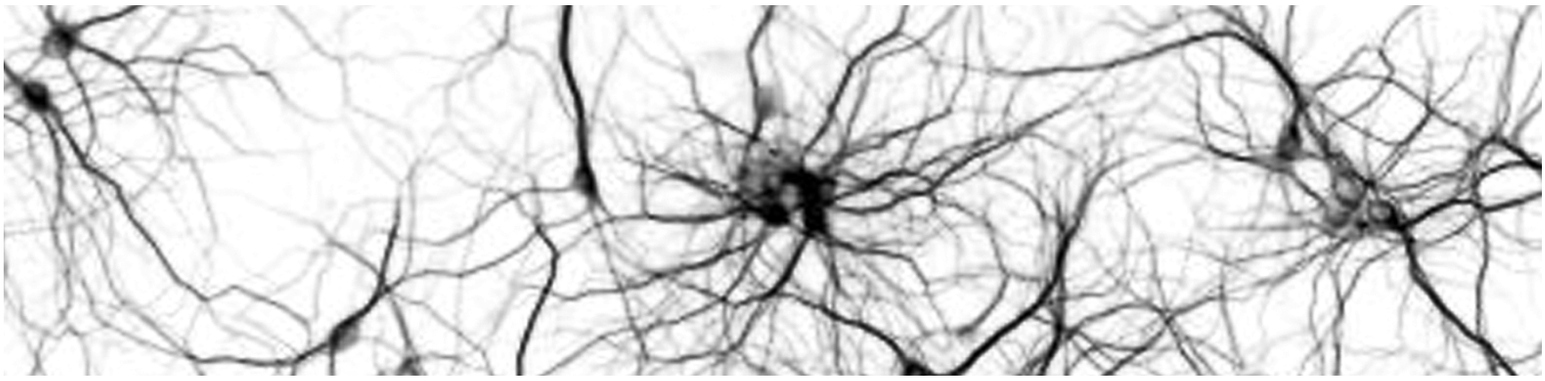
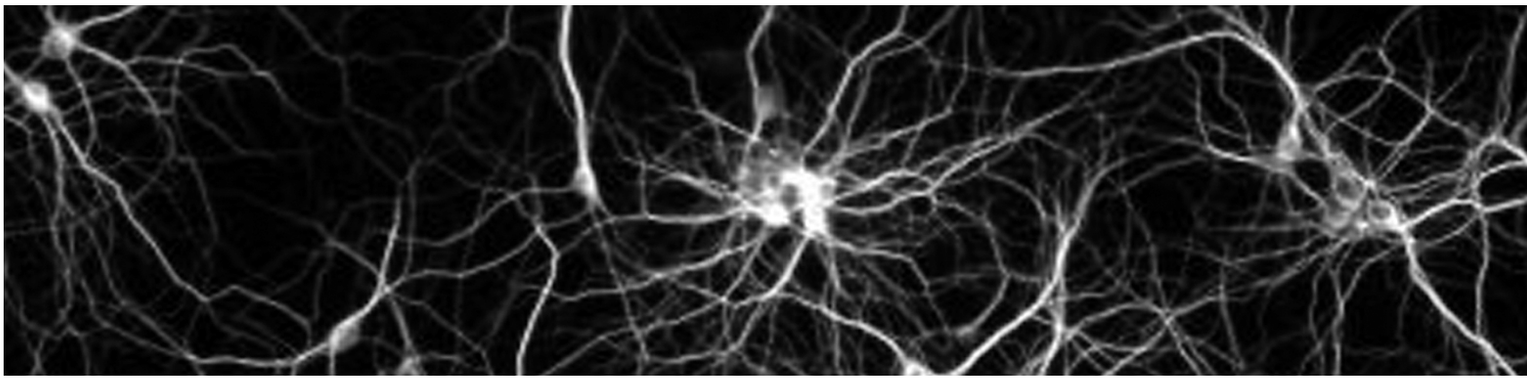


Sažeci poster prezentacija
Abstracts of Poster Presentations

Skrb za oboljele od demencije
Care for people with dementia

PP-8 (1-2)



Care for people with dementia (PP – 8 / 1)

PROBLEMS AND OBSTACLES FACING CAREGIVERS OF PEOPLE WITH ALZHEIMER´S DISEASE

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Alzheimer Disease Societies Croatia (ADSC), which provides practical and psychological help and support through working with individuals and families, represents light in the darkness.

The aim of this work is to look at the problem of burn-out in Alzheimer's disease caregivers who face a number of obstacles in realizing their rights and caring for ill members of their families.

Patients with Alzheimer's disease are a challenge for their families because of the constant care they require. Those families themselves need help and support, but one that would consist of specific practical solutions for their problems: popularization of ADSC; increasing the capacity of day-care facilities within care and nursing homes for elderly; setting up of hospice care facilities for patients in the terminal phase of their illness; involvement of well educated volunteers.

By honouring the dignity of people with Alzheimer's disease we contribute to preserving the dignity of their caregivers as well.

Care for people with dementia (PP – 8 / 2)

ARE THE COSTS OF CAREGIVES (OF PATIENTS WITH DEMENTIA) EXHAUSTION REALLY INVISIBLE?

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In clinical work we often meet patients with dementia whose care-givers are driven to exhaustion. More over the administration and insurance companies do not recognize these costs. The "burden" of 24 hour-a-day care for a patient with dementia leads to "burn out" as well as certain disturbances of mental or psychical health of partners or other family members. Moreover, the partners of patients with dementia are already elderly and prone to diseases.

We would like to present two cases of marital partners – caregivers of patients with dementia, who have had serious health problems that appeared during the years of care for their ill partners.

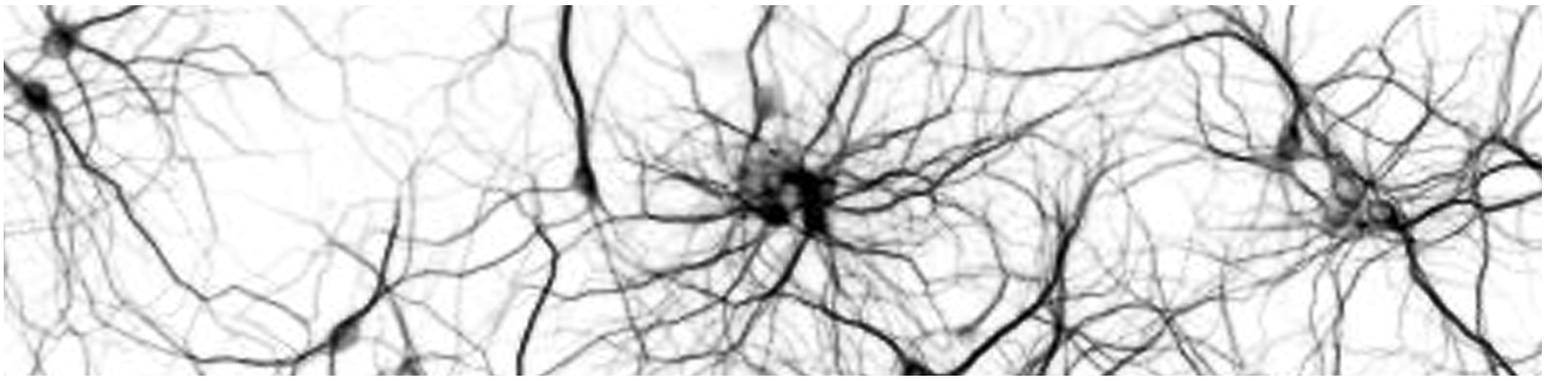
Case 1

S.G., a 82-year old man, brought his wife with Alzheimer dementia to the Psychiatric Hospital in 2007, for the first time has. She was disorganized and anxious, and had insomnia. The score on MMSE was 14/30. One of the questions her partner was asked was whether he was capable to take care of his wife needs. The advantage was that the patient was more co-operable and less anxious when her lifelong partner was nearby. She could spend hours just listening to his stories about World War II and his own traumas. Two years later, the man has had a heart attack. The recovery lasted three months including hospitalization in the acute coronary unit, and a rehabilitation programme in bath. During that period of time his wife was re-hospitalized.

Case 2

A.Z., a 64-year old woman, has been taking the care of her husband with vascular dementia for four years. She also took care of any legal problems that they have had with their accommodation and housekeeping without any help. The exhaustion and sleep deprivation resulted with psychotic decompensation and she was hospitalized for 56 days.

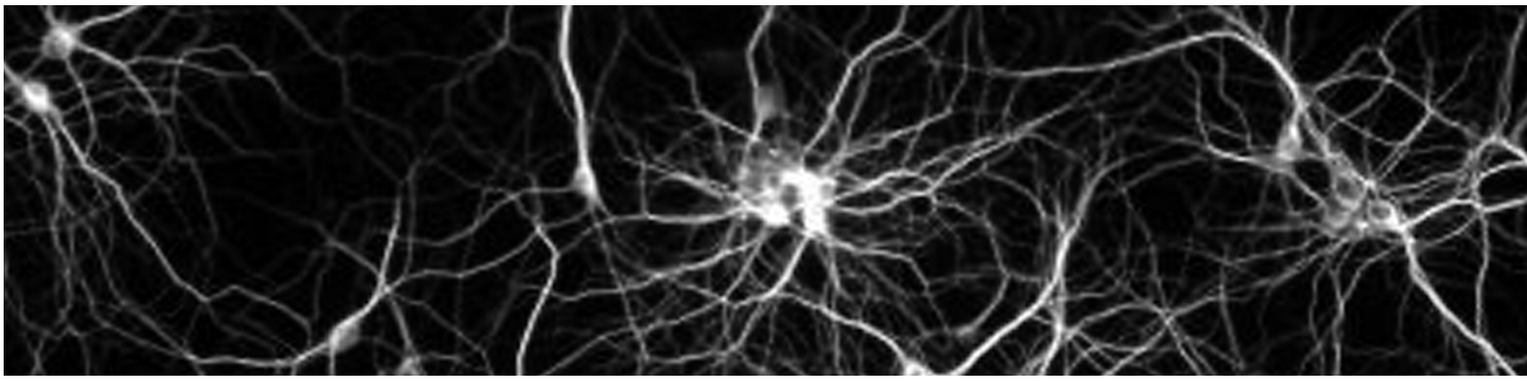
We would like to emphasize that the health problems of our patients did not only simple concede with the period of care for their ill partners, but could be related to the exhaustion and stress caused by their partner's disabling disease.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Ne-Alzheimerove demencije
Non-Alzheimer dementia

PP-9 (1-3)



Non-Alzheimer dementia (PP – 9 / 1)

RAPIDLY PROGRESSIVE DEMENTIA - CREUTZFELDT-JACOB DISEASE?

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In this report we will describe an 73- year old female patient, admitted in our Hospital in order to impairment mental status, with behaviour alteration , psychomotor agitation and verbal aggression and advanced vision deterioration.

After few days complete loss of vision appeared, with lateral eye oscillation, muscle rigor, and inability to establish verbal contact with a patient.

Further neurologically investigations, including EEG pointed at changes that could be indicative for Creutzfeldt-Jakob dementia.

Cerebrospinal fluid immunological investigations have been done including S-100B protein, NSE, Tau protein, 14-3-3 protein. Since all results were positive, we transfer our patient on Infectious Disease Clinic.

We would like to point out, necessity of concidering less frequently causes of rapidly –progressive dementia in our daily clinical practice.

Non-Alzheimer dementia (PP – 9 / 2)

DEMENTION IN HUNTINGTON'S DISEASE

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Patient V. G., age 67, retired, widow, mother of two.

The patient was treated in Psychiatric Hospital Lopača on two occasions. The first treatment lasted from 29/6/2006 till 12/9/2006 and the second treatment lasted from 19/9/2007 till 30/11/2007. Prior to the aforesaid treatments, the patient had undergone outpatient treatment by neurologists and psychiatrists due to various difficulties related to Huntington's disease.

Hospitalisations followed after worsening of neurological deficit accompanied by persecutory delusions and various difficulties related to Huntington's disease. Therapy involving blockage of dopamine receptors was applied, as well as atypical antipsychotics from the MARTA group. Since the second hospitalisation till today, the patient has been functioning at home.

Autosomal dominant inheritance pattern is recognized in the family. So far, the disease has not afflicted family descendants who refused to participate in genetic testing.

Huntington's disease is caused by gradual degeneration of the basal ganglia and cerebral cortex. It usually occurs between the ages of 35 and 50. Main symptoms include progressive demention, dystonia, chorea with pronounced involuntary movements. Death usually occurs 15-20 years after the onset of symptoms. There is no specific treatment and autosomal dominant is the way a disease is passed down. Currently, there are researches of transplanting stem cells into the patients' striatum and clinical studies with neuroprotective medications. However, treatments have not yet been clinically applied.

Non-Alzheimer dementia (PP – 9 / 3)

VASCULAR COGNITIVE IMPAIRMENT IN ASYMPTOMATIC PATIENTS WITH SEVERE CAROTID STENOSIS OR OCCLUSION

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Background and aims

Vascular risk factors have an important role in the development of cognitive decline. Advanced stenosis or occlusion of the internal carotid artery (ICA s/o) is known to be associated with vascular risk but also with cognitive decline. We therefore evaluated cognitive functions in patients with vascular risk factors with and without advanced carotid disease.

Patients and methods

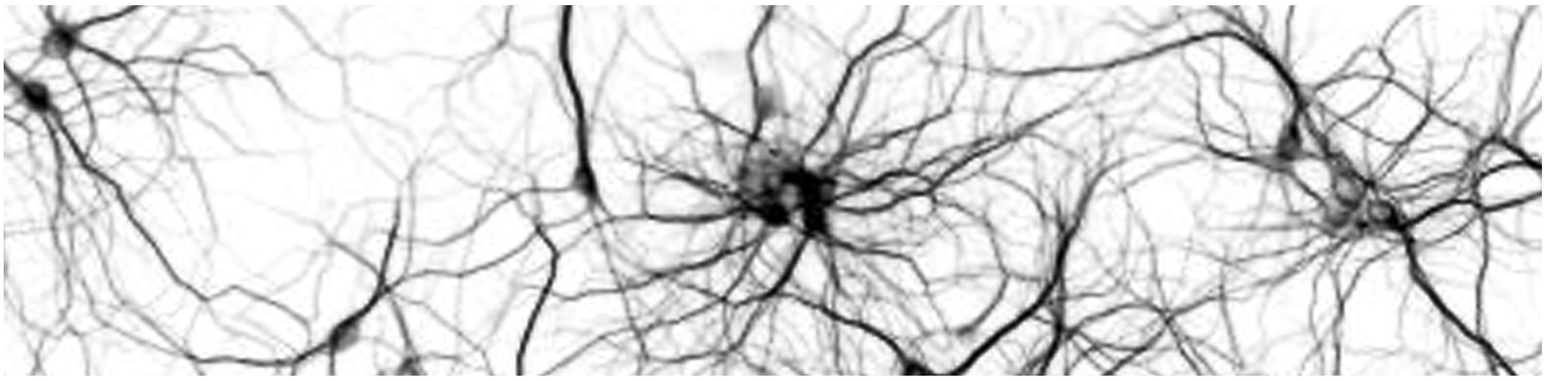
Cognitive status of 42 patients with vascular risk factors, diagnosed with mild cognitive impairment (MCI) and with advanced ICAs/o (PG) was compared with age and gender matched control group of 42 MCI patients with vascular risk but without ICAs/o (CG). Cognitive testing was performed using MMSE and Montreal Cognitive Assessment (MoCA). Cognitive performance on both tests and on cognitive domains covered by MoCA was correlated with vascular risk profile.

Results

Compared to MCI patients without concomitant advanced ICA s/o, MCI patients with ICA s/o scored significantly worse on MoCA ($p = 0.049$) and on the short-term memory domain MoCA subtest ($p = 0.026$). MMSE cognitive scores did not differ significantly between groups. Analysis of cognitive domains covered by MoCA in subgroups of participants with different vascular risk factors showed significant association of impaired attention with hypertension, diabetes, hyperlipidaemia, smoking and with multiple risk factors (>2). Diabetes was also significantly associated with the impaired language domain ($p < 0.05$).

Conclusion

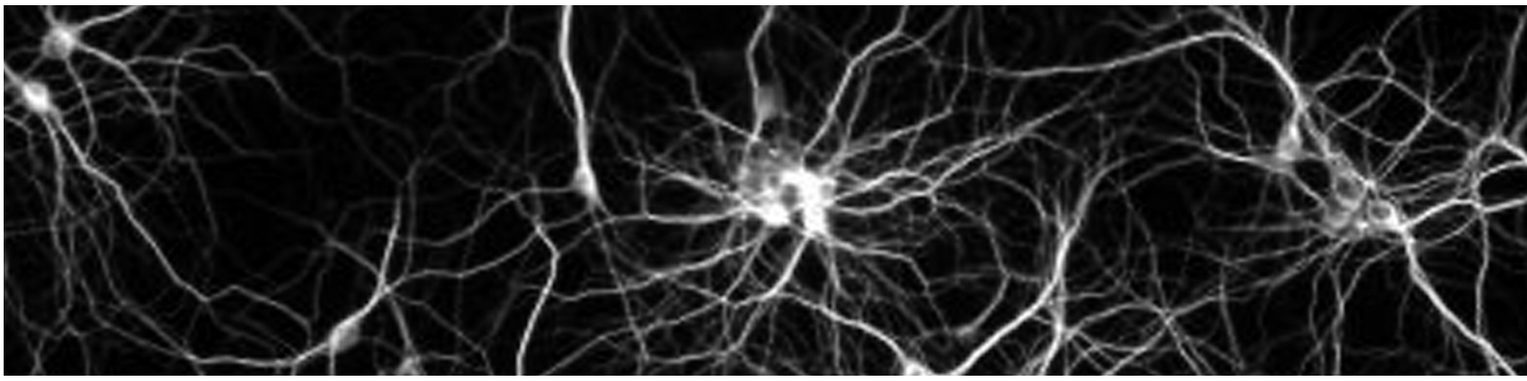
Patients with vascular risk factors and concomitant advanced carotid disease seem to be at increased risk of developing cognitive decline. The pattern of cognitive impairment could be easily revealed when MoCA subtests scores are analysed.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Kvaliteta života u demenciji
Quality of life in dementia

PP-10 (1)



Quality of life in dementia (PP – 10 / 1)

ALZHEIMER DISEASE SOCIETIES CROATIA DAY, CELEBRATED WITHIN THE CULTURE PROGRAMME FRAME

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Aim

For 7 years now, the Art Boutique "Galerija Boja" undertakes the organisation of cultural & artistic manifestation termed "Summer at the Zrinjevac Park", which represents a splice of dancing, on-stage music, fashion, and theatrical performances aimed at ennobling and reviving the Zrinjevac Park, and at reinstituting its former image and the title of the "most beautiful promenade hosted by the City of Zagreb". Owing to these efforts, for a couple of days Zrinjevac Park becomes the place of gathering and mingling of the citizens of Zagreb.

Having in mind the citizen's proneness to spontaneous gathering at the "Summer at Zrinjevac Park" venue, and led by the idea that even casual events can be good places for making a point and for bringing the AD patients' issues upfront, programme authors led by the originator Vladina Dajčić – the owner of the "Galerija Boja" Art Boutique, have come up with an evening-long happening termed "ALZHEIMER DISEASE SOCIETIES CROATIA DAY".

Methods

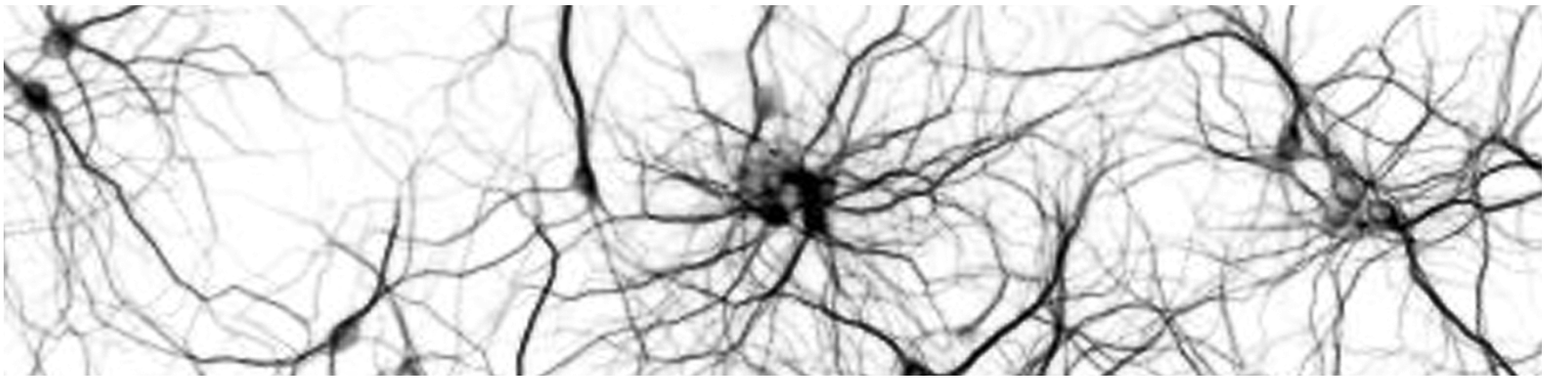
At some point, the joy given by the on-stage music programme attended by the invited family members of the diseased, and sometimes even by AD patients in person, as well as by field-oriented professionals and other invited citizens of the City of Zagreb, but also by people randomly passing by, and the joy of mingling on a beautiful summer night under the treetops of hundreds of years-old planes populating the Zrinjevac Park do their magic – each and every attendee gets carried away, at least for a moment, and escapes into a dreamland far from reality.

However, even in such "flirty" and cosy atmosphere, the burden of the disease, all its challenges, and the support provided by the ADSC, still remain to be the topic. All interested parties have the appropriate educational material at their disposal, while gains made in the previous year are reflected upon by the President of the ADSC Professor Ninoslav Mimica, MD, PhD, by way of a short oral presentation.

In the last two years, the evening was brought to climax with the opening of the exhibition of paintings made by an amateur artist Mr Zvonko Ozmec, the man who suffers from Alzheimer's and who had been blind as to his artistic talent until being diagnosed with the disease.

Conclusion

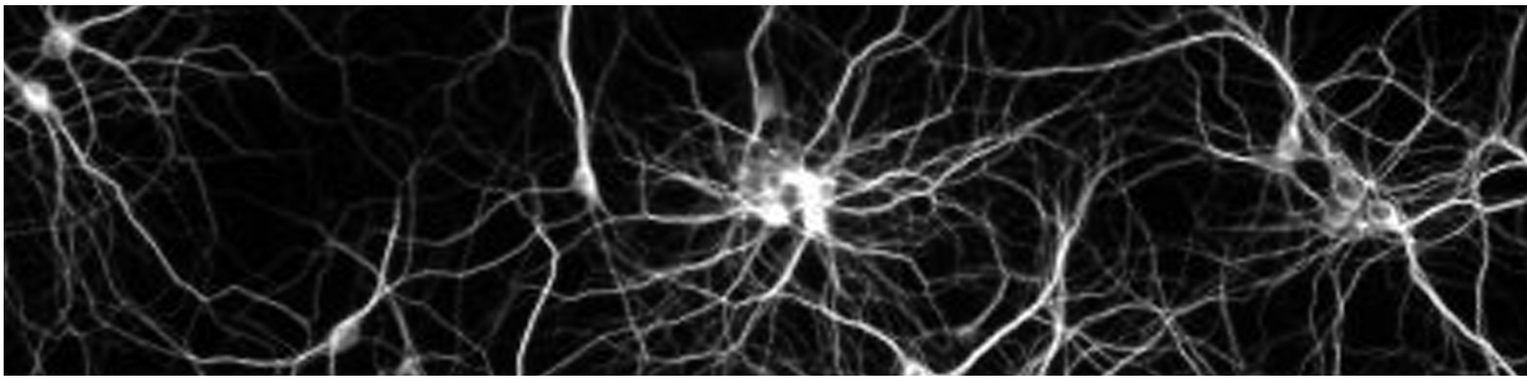
As always in life, the diseased and their families should strive to find at least sparks of beauty in hard and sad realities of their lives, and strive to keep the memory of happy moments shared with their loved ones prior to the onset of this vicious illness. It is that very same beauty of the moment that shelters our Zvonko while he sketches and paints; his pieces, so precious to his family and us, his friends and acquaintances, shall be remembered as the material evidence of the last glimpses of his conscious mind. By exhibiting his paintings, we also made an effort to bring mysterious ways in which the Alzheimer's works closer to you all.



Sažeci poster prezentacija
Abstracts of Poster Presentations

Udruge za AB i skupine samopomoći
AD Associations and support groups

PP-11 (1-4)



AD Associations and support groups (PP – 11 / 1)

ALZHEIMER DISEASE SOCIETIES CROATIA – THE ANNUAL ASSEMBLY OF THE ASSOCIATION PLUS 2009 - 2010 REPORT

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On the occasion of a regular annual assembly of the Alzheimer Disease Societies Croatia (ADSC), convened on July 8th, 2010 and attended by numerous Association members, the President of the ADSC, Assist. Prof. Ninoslav Mimica, MD, PhD, submitted the Report on the activities carried out in the foregoing year, the referent period being counting down from the day of the last session and coming down to May 2009-July 2010.

Regular activities undertaken from 03/15/2009 to 07/08/2010

From 03/15/2009 on, the Alzheimer Disease Societies Croatia has regularly and continuously pursued its agenda, nested on the newly-opened premises in 24 Vlaška Street. The agenda in reference embraces the following:

- Establishment of a Counselling Office meant for AD patients' family members that offeres regular weekly counselling sessions; keeping that pace up, a total of 58 counselling sessions had been held until 07/08/2010;
- Caregivers-oriented self-aid groups, which had held their regular weekly meetings; in line with the foregoing, as many as 57 group meetings had been held in the referent period;
- A "round-the-clock" emergency line, opened throughout a year (24/7); counsel and support had been provided not only to numerous AD patients' family members and caregivers calling from all over Croatia, but also to a steadily rising number of callers from Bosnia & Herzegovina.

Expert and scientific meetings

ADSC members took active part in the following expert and scientific meetings:

- 13th Congress of the European Federation of Neurological Societies (EFNS), Florence, Italy
- 10th International Meeting on Cholinesterases, Šibenik, Croatia
- 3rd Croatian Congress on Neuroscience and 4th Croatian Congress on Psychopharmacotherapy, Zadar, Croatia
- 1st Croatian Congress on Prevention and Rehabilitation in Psychiatry, Sveti Martin na Muri, Croatia

- 25th International Conference on Alzheimer Disease International (ADI), Thessaloniki, Greece
- 2nd Croatian Congress on Side Effects of Psychopharmacs, Rovinj, Croatia
- 7th Croatian Psychiatry Days, Opatija, Croatia
- 24th Danube Congress of Psychiatry & Central Neuropsychopharmachological Symposium (CENP), Zagreb, Croatia

Promotional – Educational activities

Celebration of the World Alzheimer's Day, held on 09/21/2009

ADSC members had celebrated the World Alzheimer's Day by organising an apposite full-day presentation of the Association and its agenda. Educational materials were displayed on 4 benches placed on the Zagreb Flower Square (Cvjetni Trg) and attended by numerous active members of the Association, as well as by physicians specialised in the field and volunteers, who handed the materials over to the interested parties. For several years now, this initiative keeps going under the motto "Autumn rose for the fall of life", since the apposite sale of roses, exquisite in their beauty, aids in raising funds necessary for the pursuance and fulfilment of the Association's agenda. On the top of that, this symbolic purchase gesture helps in raising public awareness on the ubiquity of this severe condition, as well as in reinforcing humanity in general.

ADSC Doors-Open Days, scheduled for 09/21/2009 – 09/23/2009

The premises of the Association had hosted the "1st Doors-Open Days", allowing all interested parties to come in direct contact with the physicians who collaborate with the Association, as well as with the Headmistress of the Counselling Office, and to gather relevant information.

Alzheimer Disease Societies Day

For a number of years now, ADSC has been actively involved into the cultural & artistic manifestation named "Summer at the Zrinjevac Park", within the frame of which a full day is devoted solely to the Association promotion and the presentation of its agenda. Insofar, such presentations were held on 07/18/2008, 07/16/2009, and 06/28/2010. This presentation aims at raising and reinforcing the awareness on the existence of the Association, its agenda and achievements throughout a year, as well as at widening the scope of knowledge on Alzheimer disease, the first signs of its onset, and possible aid that can be offered to AD patient's family members.

Other activities

Within May 2009 - July 2010 timeframe, the ADSC members have written and published two brochures, as follows:

- the brochure entitled "Alzheimer disease - how to recognise it and embrace it", published on the occasion of the World Alzheimer's Day, i.e. on 09/21/2009 (prepared by M. Dajčić under the expert guidance of N. Mimica, M. Ivčić, G. Šimić, and G. Ivkić);
- the bulletin entitled "10 years of ADSC activity", published in June 2010 on the occasion of the tenth anniversary of the Alzheimer Disease Societies (prepared by M. Dajčić under the expert guidance of N. Mimica)

Assembly wrap-up:

On the occasion of this year's Assembly, the following conclusions had been reached:

- Care provided to AD patients is still inadequate; on these grounds, the ADSC shall make an urgent motion before Croatian competent authorities and institutions so as to improve that care conformant to the following guidelines:

1. Accommodation of the diseased

- The implementation of the provisions laid down by the Ordinance on Accommodation of AD Patients in Elderly Healthcare Centres, as well as the implementation of the applicable Law should be ensured; the procedures relative of AD patients' accommodation should be simplified and made quicker in running;
- An institution aimed at sheltering AD patients should be established without delay – special AD patients-tailored healthcare centres should be built as well;
- More nursing residencies accommodating patients during the day should be opened; these could operate under the wings of Elderly Healthcare Centres

2. Treatment of the diseased

- AD patients should be supplied with their medication at the expense of the Croatian Institute of Health Insurance (CIHI);
- AD patients should be cleared for physiotherapy at the expense of the CIHI;

3. Attitudes towards the patient and his/her caregivers

- AD patients should be officially considered as disabled persons;
- Attitudes towards AD patients' family members and caregivers should be greatly improved, since they carry most of the disease burden on their shoulders, therefore greatly contributing to the reduction of workload of both healthcare facilities and social institutions.

The state should undertake to clearly define and perceive Alzheimer disease as a public health problem of the 21st century and shape the apposite national disease management strategy.

AD Associations and support groups (PP – 11 / 2)

GLOBAL ALZHEIMER'S DISEASE CHARTER – CROATIAN TRANSLATION

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On World Alzheimer's Day (WAD) 2008, 21 September, Alzheimer Disease International (ADI) released the Global Alzheimer's Disease Charter, a document highlighting the current dementia epidemic we are facing and calling for governments and stakeholders across the world to adopt six key principles to improve the lives of people with dementia and their carers. An accompanying petition ran alongside the Charter, inviting people across the world to sign in support of the Charter's six principles. On 30 April 2010 the petition was closed and a total of 54,821 signatures were received from 138 countries and territories, marking an unprecedented amount of support of the global dementia movement. ADI's member associations translated the Charter in order to reach as broad an audience as possible and, as a result of this, the Charter was made available in 17 languages (English, Arabic, Bengali, Chinese, Croatian, Dutch, Farsi, Finnish, French, German, Greek, Hungarian, Indonesian, Japanese, Korean, Spanish and Tamil).

The Croatian translation of Charter and petition was done by Alzheimer Disease Societes Croatia (ADSC), and petition was signed in public, during the WAD 2009, on one of the main squares in the centre of Zagreb. The Major of Zagreb and the coach of football team Dinamo have also recognised the importance of this Charter and have signed the petition. The Charter was presented to the World Health Organization (WHO) during the World Health Assembly in May 2010. It is hoped that the document will encourage the WHO and governments around the world, including Croatia, to make dementia a health care priority. The ADSC is proud to be part of these future changes.

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AD Associations and support groups (PP – 11 / 3)

ALZHEIMER DISEASE SOCIETY CROATIA – MEMBER OF ALZHEIMER'S DISEASE INTERNATIONAL AND ALZHEIMER EUROPE

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The Alzheimer Disease Societes Croatia (ADSC) since its beginnings from 1999 has one main goal – we want to help people with dementia (PWD), their families and careers, we fight stigma, and bring education to target and general population. In ADSC we realize early that we need to find powerful alliance for our mission. So, ADSC is now a full member of Alzheimer's Disease International (ADI), and provisional member of Alzheimer Europe (AE). ADI is the international federation of 73 Alzheimer associations around the world. It was founded in 1984 as a network for Alzheimer associations to share and exchange information, resources and skills. ADI is based in London and is registered as a non-profit organization in the USA. ADI has been in official relations with the World Health Organization since 1996. Each member is the national Alzheimer association in their country who support people with dementia and their families. ADI's mission is to improve the quality of life of people with dementia and their families throughout the world. You can find more about ADI on www.alz.co.uk. AE is an umbrella organisation of 34 Alzheimer associations from 30 countries across Europe. AE office is based in Luxembourg, and had international Board consisting of 12 members from different countries. You can find more about AE on www.alzheimer-europe.org. Members from ADSC are "working locally but thinking globally", so we are trying to follow-up the initiative and programs of ADI and AE. For example we are celebrating every year World Alzheimer's Day (WAD), this year we are involved in World Alzheimer's Month (WAM) through organizing the 5th Croatian Congress on AD with international participation. ADSC representative(s) are participating in ADI Conferences regularly and are planning to attend the AE Conferences in the future. Also we in ADSC are responding to various surveys on the topic of dementia, quality of life in persons with dementia (PWD) and carers. More about ADSC activities you can find on www.alzheimer.hr.

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AD Associations and support groups (PP – 11 / 4)

ALZHEIMER DISEASE SOCIETIES CROATIA – RAISING AWARENESS AND FIGHTING STIGMA THROUGH ARTS

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Alzheimer Disease Societies Croatia (ADSC), since its beginnings from 1999 is giving education, fighting stigma through various segments of arts. With these activities we have started on 3rd Croatian Congress on Alzheimer's disease with international participation, held at Brijuni in 2006 where we have set up an exhibition of sculpture constructs "In honor of Alois Alzheimer" by our colleague Assist. Prof. dr. Eduard Pavlović. On the same occasion we have also started with movie projections which are dealing with the old age and/or dementia, and view a film On Golden Pond. In 2008 during 4th Croatian Congress on Alzheimer's disease with international participation which was held on St. Andrew's Island near Rovinj, Croatia we have had an exhibition of paintings, under the name: "Fall of Man – Faces of Dementia" done by our colleague Primarius Ljubomir Radovančević, MD, DSc. On this Congress everybody was trilled with movie Iris. In 2010 in Zadar, on this 5th Croatian Congress on AD with international participation, which is the biggest meeting on AD in Croatia ever happened, we are opening the drawing exhibition by Zvonko Ozmec (person with AD) who was never drawing pictures before developing AD, and who was advised to start with art therapy while attending the daily care centre. This time, the Congress participants will be offered to see movie The Notebook. We are also proud to announce that ADSC is organizing every year the humanitarian public happenings called "Summer evenings on Zrinjevac" in which we, through music and retrofashion raise some money for ADSC.

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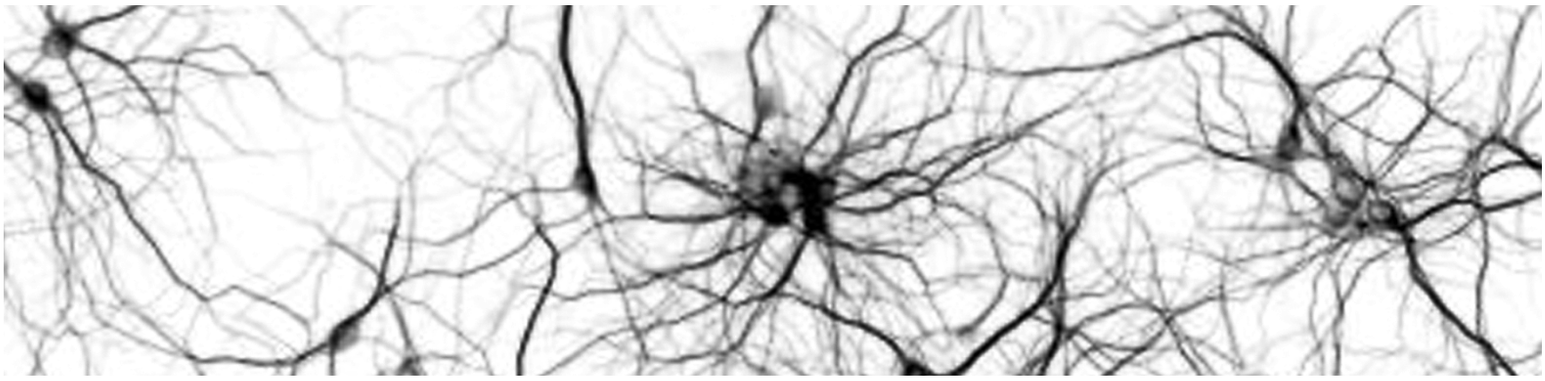
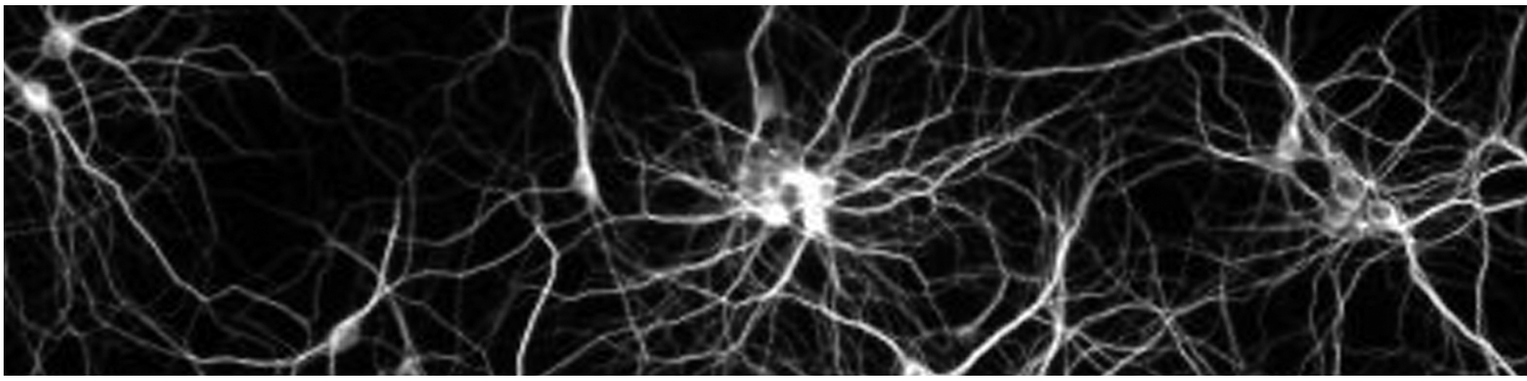


Sažeci poster prezentacija
Abstracts of Poster Presentations

Ostale teme

Free topics

PP-12 (1-10)



Free topics (PP – 12 / 1)

CONTINUOUS TREATMENT OF PSYCHIATRIC PATIENT - SUCCESS FOR LONGER REMISSION

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Purpose

To show that the lengthy and time taking the therapy in psychiatric patient in geriatric conditions leads to a long phase of remission. Show case: patient buildings due to lethargy, indifference to the environment and to themselves, refusing to take a food and disturbed sleep

This patient is come to our institution in other mental hospital because of worsening she had a bad psychic condition: lethargy, suspiciousness, hearing voices, insomnia, neglect of personal hygiene.

Many years on many occasions treated in hospital with mental stages and remission and acute especially living alone and no one to take account and whether receiving regular therapy.

Methods

Surveillance,

- call-behaviour cognitive therapy
- family-therapy
- social clubs
- pharmacotherapy
- the patient was treated primarily by a multidisciplinary team of psychiatrist, psychologist, social worker and internist.

During the ten years under the influence of antidepressants and therapy neuroleptic the patient does not appear on the new attack schizoaffective disorder. Under the regular supervision of a team of nurses and doctors who closely observed every psychological change and regular treatment of therapy the patient was ten years of proper psychological plan.

With frequent calls by the psychologist and participation in therapeutic sessions of social clubs, active participation of its part of the department with helping low-skilled staff, affective are well kept. Somatic health was monitored by a team of internal and in our institution spent more than ten years.

Conclusion

Regular intake of therapy in patients with psychiatric disorders and lead to more lasting quality remission.

Free topics (PP – 12 / 2)

CHARLES BONNET-OV SINDROM KOD STARIJIH LJUDI

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When a patient presents with vivid visual hallucinations, a doctor probably considers common diagnoses such as delirium, dementia, psychoses, or a drug related condition.

Charles Bonnet Syndrome (CBS) is a rare condition in which people experience complex, persistent or repetitive, stereotyped visual hallucinations in absence of significant neuropsychiatric disease. It is associated with deteriorating of vision and good insight.

The majority of patients diagnosed with CBS are elderly probably because of the prevalence of visual impairment in this group. It was first described by Charles Bonnet, a Swiss philosopher and naturalist of his grandfather in 1769 but can often be misdiagnosed. Its prevalence in patients with visual impairment varies from 10% to 15%. The common conditions leading to the syndrome are age related macular degeneration, followed by glaucoma and cataract.

These hallucinations, which are always outside the body, may last from a few seconds to most of the day. They may persist for a few days to many years, changing in frequency and complexity. They have no personal meaning, and many patients can voluntarily modify them or make the image disappear if they close their eyes. The imagery is varied and may include groups of people or children, animals, and panoramic countryside scenes. The syndrome can occur in people with normal vision. Some have argued that diagnosis of the syndrome does not exclude or require eye disease or brain lesions and that it could even be due to lesions that are not associated with the visual system. Reduced or absent stimulation of the visual system (deafferentation hypothesis) leading to increased excitability of the visual cortex is one of the hypotheses.

Treatments with drugs remain unsatisfactory, with poor evidence for the efficacy of atypical antipsychotics and anticonvulsants. The lesson should therefore read "not all elderly people with visual hallucinations have dementia".

Free topics (PP – 12 / 3)

RESEARCH ON A RATE OF COGNITIVE DAMAGE IN DIABETIC PATIENTS IN CITY OF MOSTAR AREA, BOSNIA&HERZEGOVINA

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Aim

Evaluate cognitive status of insulin dependent and non-dependent diabetic patients, examine relation between duration of the disease and degree of cognitive damage and set the guidelines for preventive action and further research in presence of comorbid diseases.

Sources and Methods

Work is prospective research study of cognitive damages in diabetic patients in area of city of Mostar. Instrument used for monitoring of cognitive damage is Mini Mental State Examination (MMSE) which besides score, also takes into account level of education and age. Altogether 125 patients have been examined during regular endocrinologist control examinations, ambulance of family medicine and Internal unit of the Hospital. Elimination criteria were lack of basic education and already diagnosed cerebrovascular disease. Research was conducted over a period March-April 2010. Statistic and graphic processing was done in Microsoft Excell.

Results

125 patients have been examined (men 48%,women 52%). DM typ 2 is present in 71% and average duration of disease is 10 years, while in the group over 50 years of age were 72 patients -25% of total number signs of cognitive damage (score less then 24) - without cognitive damage-75% with average duration of the disease 6 years - mild cognitive damage 15% with average duration of the disease 9 years - severe cognitive damage -10% with average duration of the disease 13 years.

Conclusion

Monitoring and treatment of diabetes must include analysis of cognitive damage. Target group for early treatment should be patients with mild cognitive damage. It's desirable to conduct monitoring in 2-years intervals and depending on indications incorporate specific therapy. Particularly analyse effects of comorbidities, especially hypertension and thyreoid dysfunction for which, with similar mechanisms principle, exist clear proof of having acceleration on cognitive deterioration.

Free topics (PP – 12 / 4)

NEUROGENIC BLADDER AND ALZHEIMER'S DISEASE

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Alzheimer's disease is a progressive degenerative condition commonly occurring at the age of 50-70, often associated with urinary disorders. Namely, most patients are diagnosed as having urinary incontinence which represents a component of the degenerative condition in question.

This study comprised a total of 11 patients diagnosed with Alzheimer's disease, clinically presenting with, or complaining about, urination problems.

Only patients classified as suffering from a mild form of the disease, as established by the Clinical Dementia Rating Scale, were deemed eligible for the study. Each and every patient included into the study had undergone an initial urodynamic workup comprised of the sphincter EMG + cystometry + uroflowmetry.

The study aims at objectiviting the functional status of the urinary tract by virtue of urodynamic workup potentially offering the possibility of establishing the exact form of urinary disorder as well. All patients had been treated with donepezil.

A control urodynamic evaluation had been undertaken 12-15 months following the initial diagnostic imaging. The initial urodynamic workups had indicated that a urinary disorder can be well-documented in not more than 32% of patients; in the majority of cases this disorder manifests as either vesical urinary retention or detrusor-sphincter dyssynergy.

Control urodynamic evaluation had revealed that 76% of patients suffer from a urinary disorder, presented in most cases (61%) in the form of vesical incontinence (unstable or uninhibited detrusor).

The results obtained by this study can be attributed to the administration of cholinesterase-inhibiting agents which had contributed to the onset of the urinary disorder elaborated above.

It can be concluded that in a vast majority of clinically apparent incontinence cases seen in Alzheimer patients and viewed as a component of the primary disease, pharmacotherapy of the latter can be held responsible for their onset.

Free topics (PP – 12 / 5)

DIFFERENTIAL DIAGNOSIS BETWEEN MULTI INFARCT DEMENTIA AND ALZHEIMER'S DISEASE

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Differential diagnosis between MID and DAT As people age, their likelihood for dementia increases exponentially. About 10% of population aged 65 or above suffer from it to some degree, and about 60% of these requiring long-term custodial care are demented. More than half of them have DAT (Alzheimer's disease), 25% have MID (multi-infarct dementia) and about 10% have a combination of two, with a variety of causes being responsible for remainder. The major causes for dementia due to cerebrovascular diseases include lacunar state, bilateral watershed infarctions, and multiple infarcts (particularly of the medial temporal lobes).

A clinical differential diagnosis that is often difficult is the one between leucoencephalopathy (Binswanger's Disease) and DAT. Memory and cognitive impairment are features of both, but the findings of associated hypertension and asymmetric focal deficit suggest Binswanger's Disease and diffuse periventricular white matter changes and lacunar infarcts on CCT confirm the diagnosis. A dementia index is helpful for identifying changes due to multiple infarcations.

An example of such index is Hachinski ischemic score: PARAMETER POINT VALUE Abrupt onset 2 Stepwise deterioration 1 Fluctuating course 2 Nocturnal confusion 1 Relative preservation of personality 1 Depression 1 Somatic complaints 1 Emotional incontinence 1 History of hypertension presence 1 Evidence of associated atherosclerosis 1 Focal neurological symptoms 2 Focal neurological signs 2 ≤ 4 – Primary neuron degeneration (DAT) 5-6 - Equivocal ≥ 7 – Multi infarct dementia (from Hachinski et al. Arch Neurol 1975;32:632-7). In fully developed cases, mental status examination alone cannot clearly distinguish the dementia secondary to vascular disease from that of Alzheimer's disease. Frontal lobe release signs are common in the latter but are rare in MID.

The means for differentiating these disorders objectively are neurological evaluation, CCT or MRI. MID patients had more abnormalities of motor aspects of speech, whereas DAT patients had empty speech, more marked anomia, and relative sparing of motor functions.

Free topics (PP – 12 / 6)

ALZHEIMER'S DISEASE IN CROATIAN CIVIL LAW

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The aim of this paper is to draw attention to the importance of correct diagnosis and assessing the ability of people with Alzheimer's disease in order to protect them during court proceedings in which they could be involved either on their own will, or through manipulation by their families or environment, or even posthumously. Responsibility of primary care physicians and psychiatrists is to protect the patients by doing a more precise assessment of the patient's abilities as well as to warn them of possible legal consequences of their disease while the obligation of the expert witnesses is to answer the questions of the court morally, correctly and according to the rules of forensic profession. The paper will show the civil laws in Croatia under which people with Alzheimer disease are most often questioned, as well as the available clinical instruments that are essential to the objectification of diagnosis and assessment of functional and cognitive abilities of people with Alzheimer's disease.

Free topics (PP – 12 / 7)

STRESS COPING IN CARERS FOR PEOPLE WITH ALZHEIMER'S DISEASE

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The aim of this paper was to get insight into the coping strategies used by family members as carers for a person with Alzheimer's disease with reference to the sex of a carer and a length of care for the individual affected by the disease.

The number of participants was 38, and the age range was between 26 and 88. According to the marital status, 65.8% of research participants are married, 2.6% are divorced, 2.6% are widowers/ widows, 7.9% live with their partner, 21.1% are single. According to work status, 42.1% of participants are pensioners, 42.1% are employed, 15.8% are unemployed. The average length of nursing care is 4.5 years, and the age range of patients is between 55 and 99. Descriptive statistics are used to present the results, and the chi-square test was used to determine the variations. Data were collected in 2008 in Croatia by interviewing the carers in the Alzheimer Disease Societies Croatia in Zagreb. F-COPES questionnaire was used in research studies. It contains 30 items regarding family member's coping strategies and possible responses to problems.

There are no statistically significant differences in responses of male and female carers, but a trend is that women, more than men, tend to use social and spiritual support as a coping strategy. There are no statistically significant differences in coping strategies regarding the length of care, it is obvious though that with longer care the use of spiritual support as a coping strategy increases, and passive / evading assessment of the situation reduces. Carers with longer care increasingly use adaptive, problem-oriented coping strategies, trying to find a solution that will enable them to overcome the current crisis.

The most commonly used coping strategy of carers in the process of care for people suffering from Alzheimer's disease is a redefinition of the situation in order to accept it in a more practical way, while the least used strategy is the mobilization of family members. The results indicate the need to activate family, community and society in order to improve the quality of patient care, and to ensure that the patient and family achieve good quality of life.

Free topics (PP – 12 / 8)

MOVIES ABOUT DEMENTIA

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In last decades we are witnessing the growing interest for psychiatric and neurological disorders to be filmed in Hollywood (high profile) movies, but also in European, Asian and Indian "Bollywood" film industry. Surprisingly, the list of movies dealing with Alzheimer's disease (AD) or dementia is pretty long. Maybe the first one or one of the first movies on this topic was I Never Sang for My Father (1970), long time after this one came out the movie Age Old Friends (1989). In the year 2001 a powerfully realistic and emotional film Iris based on the life of the famous British novelist and philosophical writer, Iris Murdoch, who deteriorates because of her AD was produced. Same year Japanese film Firefly Dreams and Swedish movie A Song For Martin was relished.

Other movies on AD which we should not miss are The Notebook (2004), Sundowing (2005), Aurora Borealis (2006), Away From Her (2006), The Savages (2007). Les known but worth seeing movies on AD are Korean A Moment to Remember (2004), British Ex Memoria (2006), Spanish Y tú quién eres? (2007), Japanese Ashita no Kioku (Memories of Tomorrow) (2007), and three Indian films Black (2005), Thanmathra (2005), and U, Me aur Hum (You, me and us) (2008). All those movies coming out from non-Hollywood production are very important for the countries of their origin because they are bringing knowledge, raising awareness, fighting stigma and highlighting the problems that are people with dementia and their carers facing.

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Free topics (PP – 12 / 9)

FOREKNOWLEDGE ABOUT ALZHEIMER' S DISEASE IN ONE STUDENTS' GROUP OF THE HEALTH PROFESSIONAL STUDY

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The aim of this research is to show what like is the elementary foreknowledge about Alzheimer disease in one students' group of the health professional study. The short our own questionnaire was used in this research. Five questions with 4 offered answers were involved in this questionnaire. Every interviewee had to encircle only one of offered answers of each of questions. Students of the second level of the physiotherapy at School of Medicine in Rijeka were polled before their regular education in psychiatry.

All of 36 students knew that Alzheimer disease is one of the most represented dementia. But nobody encircled the answer that trouble in use money is one of the early sign of Alzheimer disease. Alike was the answer that the best advisable is that demented person is retained at own home.

Therefore to conclude that these students (who will be assuredly contact Alzheimer disease patients in their work in future) for this once haven't marked the importance in use money in Alzheimer disease patients just like the importance own home in function of these patients.

Free topics (PP – 12 / 10)

TIPS FOR CAREGIVERS OF PERSONS WITH AZHEIMER'S DISEASE

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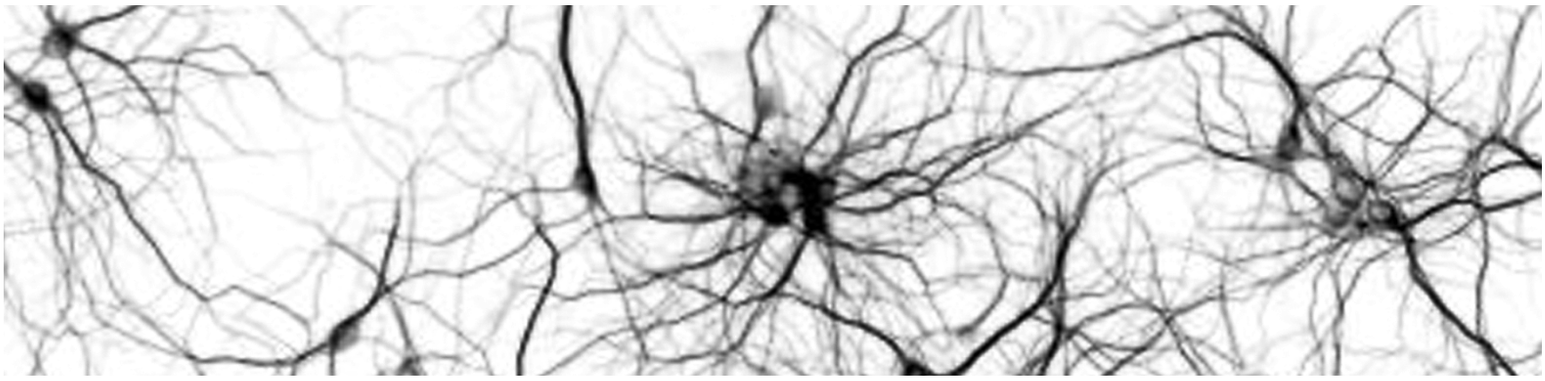
10 Tips for Family Caregivers:

1. Caregiving is a job and respite is your earned right. Reward yourself with respite breaks often.
2. Watch out for signs of depression, and don't delay in getting professional help when you need it.
3. When people offer to help, accept the offer and suggest specific things that they can do.
4. Educate yourself about your loved one's condition and how to communicate effectively with doctors.
5. There's a difference between caring and doing. Be open to technologies and ideas that promote your loved one's independence.
6. Trust your instincts. Most of the time they'll lead you in the right direction.
7. Caregivers often do a lot of lifting, pushing, and pulling. Be good to your back.
8. Grieve for your losses, and then allow yourself to dream new dreams.
9. Seek support from other caregivers. There is great strength in knowing you are not alone.
10. Stand up for your rights as a caregiver and a citizen.



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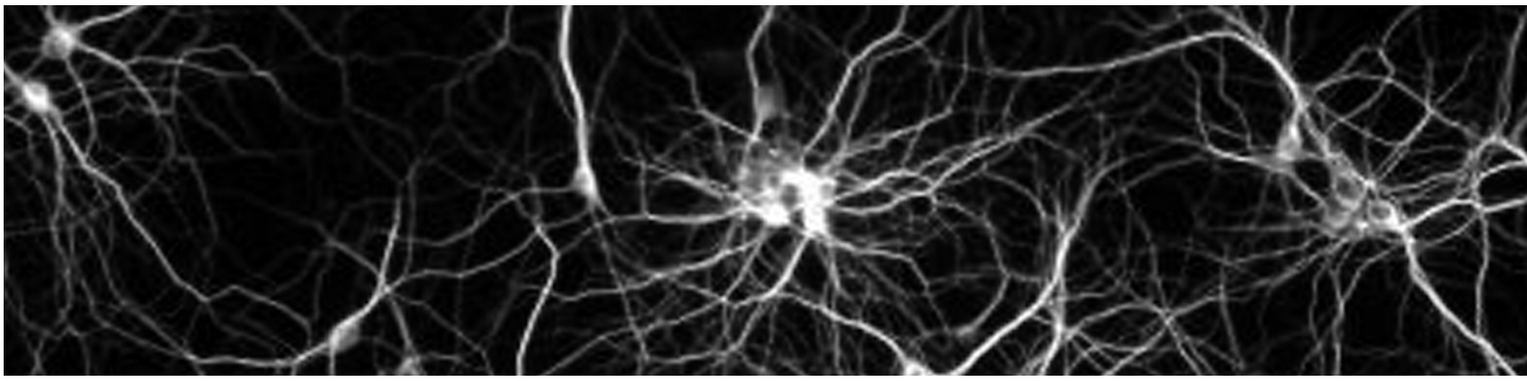

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to all institutions and firms who made this
5th Croatian Congress on Alzheimer's Disease
with international participation,
and its scientific ans social events possible.

ZAHVALA

Organizacijski i Znanstveni odbor
zahvaljuju
svim institucijama i tvrtkama
koje su pridonijele uspješnom održavanju
5. hrvatskog kongresa o Alzheimerovoj bolest
s međunarodnim sudjelovanjem,
njegovom znanstvenom i društvenom programu.

Bilješke / *Notes*

Bilješke / *Notes*