

INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION International scientific-online conference



IMPROVING MEASURES TO PREVENT ALZHEIMER'S AND COGNITIVE DISORDERS

Akbaraliyev is the son of Khojiakbar Qalandarov Qobil Suyarovich Jalilov Fazliddin Sodiqovich

Head of the Department of Pharmacy and Chemistry, DSc, Professor.

Tashkent, Alfraganus University

Abstract: Nowadays, we can see that there are many incurable diseases. Today's disease is Alzheimer's and we will get acquainted with diseases related to thinking. Alzheimer's disease is a disease that affects the mental state of a person. Although Alzheimer's and other mental diseases are not the direct cause of human death, these diseases are the impetus for the emergence of other dangerous diseases. and as a result, human life is significantly shortened. To this day, a cure for Alzheimer's disease has not been found. The research of American scientists may lead to a cure for this disease, but a specific cure for this disease has not yet been found.

Резюме: Сегодня мы видим, что существует множество болезней, от которых нет лекарства. Сегодняшняя проблема — болезнь Альцгеймера и болезни, связанные с мышлением. Вы можете подумать, что это за болезнь — болезнь Альцгеймера? Болезнь Альцгеймера — заболевание, поражающее психическое состояние человека, потерю памяти. Хотя болезнь Альцгеймера и другие психические заболевания не становятся непосредственной причиной смерти человека, эти заболевания стимулируют появление других опасных заболеваний и, как следствие, жизни человека будут значительно сокращены. До сегодняшнего дня лекарство от болезни Альцгеймера не найдено. Исследования американских ученых могут привести к излечению от этого заболевания, но точное лекарство от этого заболевания пока не найдено. В этой статье Я расскажу о болезни Альцгеймера и других психических заболеваниях, постараюсь дать более подробную информацию о мерах, которые необходимо принимать, и о том, как эти заболевания прогрессируют в организме человека.

Kalit soʻzlar: Alsgeymer, progressiv demensiya, gen mutatsiyasi, tau gipotezasi, blayshka, pepitlar, sinaptik, neyronlar, korteks, atrofiya, preddmensiya, apatiya, agnoziya, xolinergik, neyromediator, atsetilxolin, proteazlar, mikrotubalar, mikronaychalar, anamnez, xolinestariz, galantamin, donepezil, revastigmin, animanin, serebrolizin, aktovegin, tioridazin, glitsin.

Key words: Alzheimer's, progressive dementia, gene mutation, tau hypothesis, plaque, peptides, synaptic, neurons, cortex, atrophy, predmension, apathy, agnosia, cholinergic, neurotransmitter, acetylcholine, proteases, microtubules, microtubules, anamnesis,



INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION International scientific-online conference



cholinesterase, galantamine, donepezil, revastigmine, animanin, cerebrolysin, actovegin, thioridazine, glycine.

Ключевые слова:болезнь Альцгеймера, прогрессирующая деменция, генная мутация, тау-гипотеза, бляшки, пептиды, синапсы, нейроны, кора, атрофия, предменция, апатия, агнозия, холинергический, нейротрансмиттер, ацетилхолин, протеазы, микротрубочки, микротрубочки, анамнез, холинэстераза, галантамин, донепезил, ревастигмин, аниманин, церебролизин, актовегин, тиоридазин, глицин.

Alzheimer's disease has long been sought by doctors and people who described this disease. But the German psychiatrist Alois Alzheimer was able to formulate its causes, course and symptoms only in 1901. Six years later, he published a detailed study of the course of the disease in one of his patients. Since then, in the world of medicine, this disease is called by the name of the doctor. Unfortunately, recently, Alzheimer's is becoming more and more widespread and "getting younger". This disease is now found in people aged 45-65. The first symptoms of Alzheimer's appear several years before the final diagnosis. This stage of the disease is called predementia.

The first signs of the onset of the disease — First of all, it is short-term memory impairment and difficulties in learning new information. In addition, the inability to concentrate, problems with planning your activities, abstract and logical thinking, and forgetting the meaning of some words can become a danger signal. In the pre-dementia stage, apathy accompanying the disease may appear. This period is often called mild cognitive decline by experts.

Predementia is replaced by early dementia, the next stage of Alzheimer's disease. The decline in memory increases, agnosia begins to appear - a violation of various types of perception (tactile, visual, auditory). However, the sensitivity of the mind remains. Disorders of speech, perception, executive and motor functions are often noted. When it comes to the events of the distant past, long-accepted concrete facts, well-studied daily functions of a car, they are less likely to be forgotten than new information. Vocabulary decreases in the early stages of dementia. The speed of speech decreases, the coordination of movements may be disturbed, which makes it difficult to perform daily life activities. Later, the patient develops mild dementia, the symptoms listed above begin to increase, the coordination of movements is increasingly disturbed, and the ability to read and write is lost. The patient can perform basic daily functions (dressing, hygiene, etc.) procedures, etc.), but over time he will also need help. Long-term memory begins to deteriorate, behavior abnormalities appear, which usually increase in the evening: tears, irritability, aggression, even indifference may occur. It can be difficult for relatives and friends.

The last stage of the disease is severe dementia. During this period, the patient is completely dependent on external help, his speech becomes weak, and his vocabulary becomes minimal. The patient is usually apathetic, his muscle mass weakens and he



INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION

International scientific-online conference



cannot perform all the necessary movements without external help. In many cases, inactivity causes pneumonia and pressure ulcers, which are the cause of death. The cause of the disease cannot be clearly identified. Today, there are three hypotheses for the occurrence of Alzheimer's disease. These are: Cholinergic hypothesis, Amyloid hypothesis, Tau hypothesis.

According to the cholinergic hypothesis, the disease is caused by a decrease in the synthesis of the neurotransmitter acetylcholine, that is, a biologically active substance responsible for neuromuscular transmission. This theory was the first to appear, but today scientists are questioning it, because the use of drugs that restore the balance of acetylcholine does not have a good effect in the treatment of the disease. However, this hypothesis has served to create a number of maintenance therapies for Alzheimer's disease.

The amyloid hypothesis is that the main cause of the disease is the deposition of beta-amyloid peptides - bimolecular protein-type structures. In a healthy person, they protect nerve cells in the brain. Their life is short, and after performing their tasks, amyloids are destroyed by cleaning proteins - proteases, which turn them into safe toxins, which are then eliminated from the body. But if this mechanism is broken, then the defenders of nerve cells become their killers. In addition, beta-amyloid peptides combine with each other and block access to protease destroyers. Today, this theory is being actively developed by scientists to the smallest detail and has produced a number of important results.

The tau hypothesis studies a sequence of abnormalities caused by abnormalities in the structure of the microtubule-associated protein tau. Strands of this protein clump together and form tangles inside nerve cells, which is thought to cause microtubules to disintegrate and the transport system within the neuron to collapse. This leads to disruption of biochemical transmission between cells, and then to their death. Research shows that heredity increases the risk of developing Alzheimer's disease, but is not the main cause of the disease.

Reduces the risk of Alzheimer's and eases the development of: bread, wheat, fruits and vegetables, olive oil and other grain products, fish, and red wine. Ingredients in the Mediterranean diet are very, very good. Certain vitamins, including B3, C, B12, and folic acid, have been associated with a reduced risk of disease in some studies, but other studies have found no significant effect on disease onset, progression, or side effects, People who use metals, aluminum, or solvents have an increased risk of developing Alzheimer's disease.

In addition, a number of treatment methods have been developed to eliminate Alzheimer's disease, stop its development and alleviate symptoms. The effectiveness of treatment depends on early detection of the disease and timely diagnosis. If the disease is detected earlier, all the measures taken will be more effective.



INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION

International scientific-online conference



Conclusion: we can conclude about Alzheimer's disease that scientists are conducting all the research to find a cure for this disease, which is common in the elderly, as I mentioned above. Alzheimer's disease can be caused by psychoactive substances in the environment that affect the human brain, diabetes, obesity, low mental performance, or genetic or chromosomal disorders. It is very strange and very sad that the disease has such interesting and unexplored aspects, that people cannot remember it to such an extent. We believe that with our current medicine, in the next few years, this disease will become one of the unknown and completely unstudied diseases.

REFERENCES.

- 1. Колчанов Н.А., Подколодная О.А., Ананько Е.А., Игнатьева Е.В., Подколодный Н.Л., Меркулов В.М., Степаненко И.Л., Поздняков М.А., Белова О.Е., Григорович Д.А., Наумочкин А.Н.. Регуляция транскрипции генов эукариот: описание в базе данных TRRD. // Молекулярная Биология 2001, 35 (6), 934-942.
- 2. Кунин Е. В. Логика случая. О природе и происхождении биологической эволюции/Пер. с англ = The Logics of Chance. The Nature and Origin of Biological Evolution. М: ЗАО Издательство Центрполиграф, 2014. 527 с.
 - 3. Патрушев Л.И. Экспрессия генов. М.: Наука, стр-30-60
- 4. Э. Рис, М. Стернберг Введение г 1 в молекулярную биологию от клеток к атомам Москва «Мир» 2002;
- 5. Тарантул В.В., Гольцова В.А., Кузнецова Е.Д. Структурная организация генома эукариот. Итоги науки и техники, ВИНИТИ, Молек. биол., 1981, т.19, с.7-83.
- 6. Modern Biology John H. Postlethwait Janet L. Hopson Copyright © 2006 by Holt, Rinehart and Winston p-217-222.
- 7. Koonin E. V., Wolf Y. I. Genomics of bacteria and archaea: the emerging dynamic view of the prokaryotic world (англ.) // Nucleic acids research. 2008. Vol. 36, no. 21. P. 6688-6719.
- 8. Genomes and What to Make of Them By Barry Barnes; John Dupre University of Chicago Press, $2008\,$
- 9. Adam, Eve, and the Genome: The Human Genome Project and Theology By Susan Brooks ThistlethwaiteFortress Press, 2003
 10. Alsgeymer sabablari, rivojlanishi va davolash". www.tibbiyot.info.