

Objectives: to investigate methods of obtaining undifferentiated neural cells and methods of their using to treat neurodegenerative diseases, such as Alzheimer disease, various dementias.

Materials and Methods: The study and analysis if modern literature and electronic informative resources, articles of foreign and Russian authors, analysis of scientific literature.

Results: the research showed the that NSCs in particular autologous stem and progenitor cells of olfactory epithelium are used for transplantation and cell therapy of brain and spinal cord diseases in the treatment of neurodegenerative diseases. Some researchers found that neurons can be obtained by differentiating embryonic stem cells (1998, Thomson), and by therapeutic cloning. The resulting cells are intruded in the regions of the nervous system with the greatest inhibition of function and death of neurons.

Conclusion: the most promising method of obtaining and using NSCs at the moment is a biopsy of the olfactory epithelium with the subsequent introduction of the NSC in the affected areas of the nervous system, by transplanting cells directly into the affected area or electrical stimulation of cell movement.

References

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INSTALLATION OF VENEERS

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Research relevance: veneers were first installed at the end of 1930s and people become more interested in the procedure nowadays.

Objectives: to provide the information on the process of installation and analyze the characteristics to it.

Materials and Methods: 25 patients of the clinic «Petrodent» have been subjected to analysis. All patients were supplied with porcelain veneers within six months. The analysis includes questions of the indications and contraindications to the installation and some risks of veneers` damage.

Results: the analysis of the statistics has shown that restorations are made three times more often than installations of porcelain veneers, because the largest part of the population thinks that orthopedic constructions are more harmful because of significant processing of the hard tooth tissues. Clinical studies have shown that fractures and inflammatory processes in the gum margin occur more often because of metal-ceramic crowns as compared to using technique of porcelain veneers. There are no scales in the patients of our clinic, but dentists provide restorations to the patients from other dentistryes. It is explained by the dentist`s qualification: if there are extensive fillings or bite features, veneers are not installed and ceramic crowns are used instead. The most common causes of scales are peculiarity of the bite, bruxism, contact with the antagonist in the sature area, a large area of contact with the filling material, injuries, neglect to the dentist`s recommendations.

Conclusions: veneers are a good decision to improve smile. The veneers are usually installed for aesthetic reasons: unsatisfactory staining of the tooth crown, injury of the tooth, orthodontic reasons (corrections of trims and diastems, irregularities of the size and shape of adjacent teeth). Statistics shows: if all indications and contraindications are taken into consideration, the dentist is a well-qualified specialist and the procedure is done according to the instructions, veneers will serve for a long time.

References

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INTERNET ADDICTION

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Research relevance: nowadays it is impossible to imagine a person living without an access to the Internet. Internet can be used for good, or be mindlessly misused. It may cause health problems including mental diseases such as Internet Addiction Disorder (IAD).

Objective: to survey information about the disorder, its symptoms, methods of treatment, observe its historical development and evaluate the range of the disorder's spread.

Materials and Methods: review and analysis of medical literature on the theme.

Results: the idea that problematic Internet usage meets the criteria for an addiction and should be classified as a mental disorder was originally suggested by Kimberly Young (1996, USA). Since then IAD has been extensively studied and in 2013 it was included into the fifth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Emotional symptoms include: depression, dishonesty, feelings of guilt, anxiety, euphoria upon reaching the Internet, avoidance of work, agitation, mood swings, fear, loneliness, boredom with routine tasks, procrastination. Diagnosing often faces difficulties due to high comorbidity with other psychiatric disorders and extensive use of Internet throughout the world, resulting in the disorder being easily masked. Ways of treatment include mainly cognitive behavioral therapy, with some medication being administered for associated disorders. Approximately six percent of global Internet users are estimated to be addicted.

Conclusion: internet Addiction Disorder is a serious issue in modern society which will continue to expand rapidly with Internet being provided to larger amounts of world population. Governments need to consider it and develop an appropriate policy.

References

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THE ROLE OF PROTEINS IN INFANT NUTRITION

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Research relevance: lack of proteins in infant nutrition disrupts cognitive functions and immune status. Qualitative protein composition is affected by thermal processing, which may lead to interaction between dairy components with the formation of "Mayar's reaction products".

Objective: to study the influence of protein nutritional factor on growth and development of an infant's body.

Materials and methods: the researches included infants getting either artificial formula or breast milk; infants getting either standard formula or formula with reduced protein; healthy full-term newborns getting either formula with protein content 13–18 g/l or breast milk; children with allergy