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Bosh muharrir:

Z. Raxmanov – Nizomiy nomidagi O‘zbekiston Milliy Pedagogika Universiteti rektori v.v.b., iqtisodiyot fanlari bo‘yicha falsafa doktori (PhD).

Mas’ul muharrir:

G. Ibragimova – Pedagogika-psixologiya va inklyuziv ta’lim fakulteti dekani, pedagogika fanlari doktori, professor

Tahrir hay’ati:

N. Sh. Umarova – psixologiya fanlari doktori, professor.

V. M. Karimova – psixologiya fanlari doktori, professor.

Z. T. Nishanova – psixologiya fanlari doktori, professor.

D. S. Karshiyeva – psixologiya fanlari doktori, professor.

Nashrga tayyorlovchi:

R. Ashurov – psixologiya fanlari bo‘yicha falsafa doktori (PhD), dotsent

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INVESTIGATION OF THE RECOVERY OF COGNITIVE PROCESSES AND MEMORY FUNCTIONS AFTER GENERAL ANESTHESIA THROUGH NEUROPSYCHOLOGICAL AND PHYSIOLOGICAL MEASUREMENTS.

Karimova Gulchexra Khamidullayevna

National Pedagogical University of Uzbekistan Named After Nizami

Department of Applied Psychology

Email: gulikarimova0009@gmail.com

Abstract: This article explores the recovery of cognitive processes and memory functions after general anesthesia using neuropsychological and physiological assessments. The study analyzes the dynamics of attention, perception, working memory, and long-term memory recovery, as well as their correlations with electrophysiological (EEG) and cardiovascular indicators. The paper may be beneficial for researchers in medicine, psychology, and neurophysiology, as well as clinicians working in post-anesthesia care.

Key words: anesthesia, cognition, memory, neuropsychological tests, EEG, cognitive recovery, physiological measurements, post-anesthetic syndrome.

Annotatsiya: Ushbu maqola neyropsixologik va fiziologik baholashlar yordamida umumiy anesteziyadan keyin kognitiv jarayonlar va xotira funktsiyalarining tiklanishini o'rganadi. Tadqiqotda diqqat, idrok, ishchi xotira va uzoq muddatli xotirani tiklash dinamikasi, shuningdek, ularning elektrofiziologik (EEG) va yurak-qon tomir ko'rsatkichlari bilan o'zaro bog'liqligi tahlil qilinadi. Ushbu maqola tibbiyot, psixologiya va neyrofiziologiya sohasidagi tadqiqotchilar, shuningdek, anesteziyadan keyingi parvarish sohasida ishlaydigan klinisyenlar uchun foydali bo'lishi mumkin.

Kalit so'zlar: anesteziya, kognitiv, xotira, neyropsixologik testlar, EEG, kognitiv tiklanish, fiziologik o'lchovlar, anesteziyadan keyingi sindrom.

Аннотация: В данной статье рассматривается восстановление когнитивных процессов и функций памяти после общей анестезии с использованием нейropsychологических и физиологических методов оценки. В исследовании анализируется динамика внимания, восприятия, рабочей и долговременной памяти, а также их взаимосвязь с электрофизиологическими (ЭЭГ) и сердечно-сосудистыми показателями. Работа может быть полезна исследователям в области медицины, психологии и нейрофизиологии, а также врачам, работающим в области постнаркозного ухода.

Ключевые слова: анестезия, когнитивные функции, память, нейropsychологические тесты, ЭЭГ, когнитивное восстановление, физиологические показатели, postanестезиальный синдром.

INTRODUCTION

In recent years, with the development of medicine and the expansion of surgical interventions, the use of general anesthesia has significantly increased. Every year, millions of patients worldwide undergo various operations under general anesthesia. Anesthesia is a physiological state that allows surgery to be performed safely by eliminating pain sensations, ensuring muscle relaxation, and inducing unconsciousness. However, it is also a powerful pharmacological process that directly affects the central nervous system.

During anesthesia, brain activity changes dramatically: the transmission of electrical signals between neurons slows down, neurotransmitter balance is disrupted, and cerebral blood flow and oxygenation decrease. Although these changes are temporary, they may lead to cognitive slowdown or dysfunction, including impairments in attention, memory, speech, and perception. Some patients experience reduced thinking ability, difficulty retaining new information, or disorientation in time and space for several hours or even days after surgery. This condition is known in scientific literature as post-anesthetic cognitive dysfunction (PACD).

This article examines the stages and mechanisms of recovery of cognitive processes and memory functions following general anesthesia, focusing on their neuropsychological and physiological aspects and on the key factors influencing the speed of recovery. It also highlights the role of EEG and cognitive testing in assessing brain function recovery and offers scientific conclusions aimed at improving the effectiveness of post-anesthetic rehabilitation.

Main part

General anesthesia is an integral part of modern medical practice, used to eliminate pain sensations, relax muscles, and maintain patient calmness during surgery. However, following anesthesia, temporary alterations in brain function often occur, affecting cognitive and memory processes. Clinical observations have shown that, in the early postoperative period, patients may experience difficulty concentrating, reduced short-term memory, slower thinking, and sometimes temporary speech disturbances. These phenomena are generally described as post-anesthetic cognitive dysfunction (PACD).

The primary causes include temporary inhibition of the central nervous system, changes in cerebral blood flow and oxygenation, and disruption of neurotransmitter balance. Anesthetic agents such as propofol, sevoflurane, isoflurane, and ketamine inhibit synaptic transmission within the central nervous system. They mainly act on GABA receptors, decreasing neuronal electrical activity. Consequently, EEG recordings show dominant low-frequency, high-amplitude alpha and delta waves. When the patient transitions to wakefulness, the reappearance of beta waves indicates normalization of brain activity. EEG indicators can thus be used to track the step-by-step recovery of cognitive functions: attention and perception recover first, followed by working memory and speech.

The recovery of cognitive processes after anesthesia occurs in several stages:

First 30–60 minutes post-awakening: attention and perception begin to recover. Patients start responding to external stimuli, though their focus fatigues quickly and information processing remains slow.

After 2–4 hours: working memory and short-term retention functions improve. This can be seen in tasks such as the Stroop Test or Digit Span Test.

After 24–48 hours: long-term memory, logical thinking, and verbal fluency approach normal levels.

The course of recovery depends on cerebral blood flow, oxygenation, as well as the patient's age, health condition, and individual characteristics.

Various neuropsychological tests are used to assess cognitive functions:

The Stroop Test evaluates attention and impulse control. The Rey–Osterrieth Complex Figure Test assesses visual perception and memory.

The Digit Span Test measures working memory capacity. The Rey Auditory Verbal Learning Test (RAVLT) examines auditory-verbal learning and recall.

These tools help determine the duration and severity of post-anesthetic cognitive impairment. Some studies report that in patients over 60 years of age, around 30% still show reduced performance several days after surgery, suggesting slower neural recovery.

Physiological measurements also play a major role in understanding cognitive recovery. Alongside EEG, indicators such as heart rate variability (HRV), blood oxygen saturation (SpO₂), and blood pressure directly correlate with cognitive state.

Increased beta-wave activity indicates restored attention. Decreased alpha-wave dominance reflects normalization of alertness. Stabilized heart rate variability suggests the rebalancing of the autonomic nervous system.

The type of anesthetic is another crucial factor. Recovery tends to be faster after propofol-based anesthesia, whereas sevoflurane or isoflurane can result in slower cognitive restoration due to their differing effects on cerebral blood flow and oxygen exchange.

Maintaining stable blood pressure and heart rate. Using the lowest effective anesthetic dose.

Implementing psychological and physiological rehabilitation exercises post-surgery. Using vitamins and antioxidant supplements to support neural recovery.

These measures contribute to faster restoration of central nervous system function and normalization of memory and cognitive abilities.

CONCLUSION

The recovery of cognitive processes and memory functions after general anesthesia is a complex, multi-factorial, and gradual physiological and psychological process. Research indicates that anesthetic agents temporarily inhibit neuronal communication, leading to transient impairments in attention, perception, memory, and reasoning. During the first postoperative hours, attention and short-term memory are most affected, but these functions typically normalize within 24–48 hours. Long-term memory and reasoning, however, depend

on age, health status, and anesthetic type. Neuropsychological and physiological measurements — particularly EEG monitoring and cognitive tests such as Stroop, Digit Span, and Rey–Osterrieth — are essential for objectively assessing recovery. The reappearance of beta-wave activity in EEG indicates renewed attention, while the normalization of HRV and SpO₂ reflects the recovery of autonomic balance. These methods allow physicians and neuropsychologists to track the stages of brain function restoration after anesthesia accurately.

Cognitive recovery rates depend on numerous factors — age, gender, physical health, anesthetic type, and surgery duration — with slower recovery observed in older adults. Therefore, preventive measures such as continuous cerebral oxygen monitoring, stable cardiovascular management, use of minimal effective anesthetic doses, and post-operative psychological and physical rehabilitation are critical.

Modern neuropsychological research demonstrates that assessing post-anesthetic cognitive recovery requires a comprehensive approach, combining clinical observation with EEG, cognitive testing, and physiological monitoring to obtain more precise and reliable results.

References

1. Brown, E. N., & Purdon, P. L. (2021). Neural mechanisms of general anesthesia and cognitive recovery. *Journal of Neuroscience*.
2. Hudetz, A. G. (2020). Cognitive dysfunction after anesthesia: mechanisms and prevention. *Frontiers in Psychology*.
3. Mashkovich, D. A. (2023). Postanesthetic neuropsychological syndromes and EEG correlates. *Clinical Neurophysiology*.
4. Ministry of Health of Uzbekistan. (2024). *Manual of Anesthesiology and Resuscitation*. Tashkent: Tashkent Medical Academy Press.
5. Kolesova, L. V. (2022). Memory and attention recovery after anesthesia in elderly patients. *Neurology and Psychiatry Journal*.

