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The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 755 (23.12.2015). 755 Journal of Education, Health and Sport eISSN 2391-8306 7 © The Author (s) 2016; This article is published with open access at Licensee Open Journal Systems of Kazimierz Wielki University in Bydgoszcz, Poland Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution and reproduction in any medium, provided the original author(s) and source are credited. This is an open access article license dunder the terms of the Creative Commons Attribution and reproduction in any medium, provided the original author(s) of the Creative Commons Attribution on Commercial License (http://creativecommons.org/licenses/p.nc/4.0/) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited. The authors declare that there is no conflict of interests regarding the publication of this paper. Received: 05.05.2016. Revised 25.05.2016. Accepted: 25.05.2016.

# THE METHOD OF COMBINATION OF ELECTROCONVULSIVE THERAPY AND POSTICTALLY HYPNOTHERAPY IN THE TREATMENT OF PATIENTS WITH THERAPEUTICALLY RESISTANT DEPRESSION

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#### **Summary**

The description of the new method of treatment of therapeutically resistant depression by electroconvulsive therapy in combination with postictally hypnotherapy id given. Clinical and psychometric evaluation of the effectiveness of the new technique has been conducted. The results obtained show high efficacy of the method under description.

Key words: electroconvulsive therapy, depression, postictally hypnotherapy.

# КОМБИНАЦИЯ ЭЛЕКТРОСУДОРОЖНОЙ ТЕРАПИИ И ПОСТИКТАЛЬНОЙ ГИПНОТЕРАПИИ В ЛЕЧЕНИИ ПАЦИЕНТОВ С ТЕРАПЕВТИЧЕСКИ РЕЗИСТЕНТНОЙ ДЕПРЕССИЕЙ

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#### Реферат

Приведено описание новой методики лечения терапевтически резистентной депрессии – электросудорожной терапии в комбинации с постиктальной гипнотерапией. Проведена клиническая и психодиагностическая оценка эффективности разработанной методики.

Ключевые слова: электросудорожная терапия, депрессия, постиктальное внушение.

**Urgency of the Research.** Treatment of depressive disorder range, is one of the main problems of modern society.

Biological methods for the treatment of depression, which include electroconvulsive therapy, have long established themselves as etiopathogenetic – affecting influential components of the disease and is able to achieve prolonged remissions even in cases of pharmacoresistant [3, 5].

Electroconvulsive therapy was first introduced in the 1930s, and became widespread as a method of treatment of mental illness in the 1940s and 1950s. Since the beginning of the XXI century about 1 million patients a year receive electroconvulsive therapy in various diseases. The modern technique of electroconvulsive therapy with anesthesia and muscle relaxation allows in short time to achieve the significant improvements in mood without the classic electroconvulsive therapy side effects (Fig. 1) [1, 2, 5].



Fig. 1. The history of electroconvulsive therapy

**The objective:** to determine the effectiveness of our developed method of treatment of patients with therapeutically resistant endoreactive depression – "the method of combination of electroconvulsive therapy and postictally hypnotherapy".

**Materials research.** We formed two groups of patients. Patients of the first group (n=10) were treated by electroconvulsive therapy without combination with other therapies. Patients of the second group (n=12) were treated in compliance with the combined method we have developed a combination of electroconvulsive therapy and hypnotherapy (table 1).

Table 1

| The group<br>number | The number of people in the | Features group   |
|---------------------|-----------------------------|--|
| number              | group                       |  |
| 1 group             | 10                          | Treatment with the method of electroconvulsive therapy |
|                     |                             | without combining other methods of therapy             |
| 2 group             | 12                          | Treatment with the «combination of electroconvulsive   |
|                     |                             | therapy and postictally hypnotherapy»                  |

**Research groups** 

Methods of the research: psychopathological, psychodiagnostic, anamnestic.

For quantification of the results used: Hamilton Rating Scale for Depression (HDRS-HAM-D, M.Hamilton, 1960); Association test (F.E.Rybakov, 1910) [4, 6].

The equipment used: Apparatus for electroconvulsive therapy "NIVIQURE" (Niviqure Meditech Private Limited. India. Code UCGFEA: 9018 90 75 00. Certificate on registration № 8222/2008, 15.10.2008).

**Results of the study.** From the first session of our patients, we have noticed the appearance of high spirits, became more active.

However, in some cases, improving mood, negative traumatic experiences can stay and be a factor of relapse of depression.

This is because in the genesis, endoreactive depression in addition to the endogenous depressed mood, plays significant role in the cognitive component, the unpleasant thoughts and feelings of psychotrauma genesis, which arose in response to the transferred patients psychological trauma (Fig. 2).



Fig. 2. Structure endoreactive depression and treatment effect

In the purpose of this correction, we have developed a combined technique, combined electroconvulsive therapy and hypnotherapy.

Manipulation aimed at mitigating painful traumatic experiences in patients with depression who were treated by electroconvulsive therapy method consisted of two stages observed (Fig. 3).



Fig. 3. The structure of the method of combination of electroconvulsive therapy and postictally hypnotherapy

The first stage is one minute before application of anesthesia, patients were asked to focus on painful experiences. It is known that the information held in the memory shortly before General anesthesia, often leveled. This effect is potentiated electroconvulsive therapy. It is beneficial for patients if this information is traumatic for patients.

The second stage – in the first minutes after the release of patients from anesthesia, patients were susceptible to hypnotic suggestion designed with therapeutic formulas aimed at correction of traumatic experiences.

As a result of the developed technique, we have achieved two therapeutic effects:

1. Due to electroconvulsive therapy the mood of patients noticeably improved from the first session according to the test, Hamilton Rating Scale for Depression total score was reduced from  $25,2\pm0,82$  to  $5,1\pm0,21$  points (Fig. 4).



Fig. 4. The results of the study on a Hamilton Rating Scale for Depression.

2. Due to additions of electroconvulsive therapy sessions of postictally hypnotherapy, effectively neutralised by traumatic experiences, which allowed to avoid the relapse of the disease – thus, according to the associative test was noted the elimination of the previously dominant in the cognitive sphere of patients negative experiences (Fig. 5).



Fig. 5. The results of the study on Association test.

**Conclusions.** All patients who followed a course of therapy developed by our method indicated a full recovery; during one year of follow-up after therapy, disease recurrence was not (Fig. 6).



Fig. 6. The results of therapy using a new method of combination of electroconvulsive therapy and postictally hypnotherapy

Thus, we have developed methodology of combined electroconvulsive therapy and postictally hypnotherapy and have proven its effectiveness in the treatment of therapeutically resistant endoreactive depression.

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