Function biocontrol (FBC) method application in the course of depressive disturbance treatment

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The practicability of biofeedback (BFB) usage (BFB) in combination with other psychotherapeutic methods in the course of mental illnesses treatment is widely recognized. The possibility of depression and anxiety therapy, as a result of EEC BFB-training usage has been shown (Pronin S.V., 1998; Gusev E.I. et al., 2000). The necessity of psychological factors regard while using BFB-technique is stressed (patient’s self-concept elevation, self-suggestion, placebo-effect, etc) (Karvasarskiy B.D., 1999).

At the same time the indications for different BFB-training procedures application and their selection criteria during different mental diseases are still not dear enough. Thus, in some cases, BFB-procedures usage causes clinical response in the absence of substantial changes in the physiological systems.

According to the data from available sources, this method efficiency is not high along with marked disturbances of higher mental function (memory, attention, thinking, will), especially if combined with emotional disorders. At the same time, many patients, who have already passed the BFB-training course, remark long-term attention concentration ability development and mental capacity elevation. Thus we can regard the BFB-training not only as functional disorders therapy method at a concrete organism system, but also as an active way of intellectual and emotional sphere self-correction. This fact importance is evident, as long as depressive patients often have disturbances not only in emotional sphere but also in intellectual functioning.

The aim of our work was to investigate the possibilities of BFB-training application in the course of depressive disorders multiple treatment.

The investigation was made at the private mental hospital Psychological Health Ltd. on the basis of the «Izumrud» sanatorium (the header — Minutko V.L, Doctor of Medical Science, prof.) using the biofeedback system for psychophysiological rehabilitation «REHACOR».

The investigation involved 56 patients (finished observations) of both genders at the age from 16 to 60 and older. Their state corresponded to the ICD-10 depressive episode criteria. State evaluation was conducted before and after the therapy using clinical schedules (Hamilton et al.), cognitive functions investigation, MMP1, projective methods (Szondi, Lüscher color test), and cognitive induced potentials P(300).

The creation of positive motivation for BFB-training realization among patients was of considerable importance (BFB-scenario choice with consideration for personalistic features; creation of competitive climate while possessing self-regulation skill; increased attention of the clinical staff to the work results).

The set of procedures developed by "Medicom MTD" and independent ones was used. They were oriented on normalization of different organism systems functional status. The procedures were grouped according to the type of physiological signal that was applied: EEC, HR, GSR, etc.

The procedures were applied to depressive positions. there were some restrictions of unprinciplled character. The course of treatment amounted to 20-25 procedures and more.

The positive results have been achieved not only in depressive semiology reduction, but also in cognitive functions development: attention concentration ability, its selectiveness, division and stability, running memory expansion, mental capacity in general, and also P(300) development has been achieved in the course of cognitive induced potentials investigation. Therapy efficacy depended better on quality and assurance of the self-regulation skill acquirement, than on BFB-training type according to its physiological signal.

doi: 10.1016/j.ijpsycho.2008.05.425