

**Methods:** We have studied the features of clinical and psychopathological manifestations in patients suffering from epilepsy. The study covered 27 patients who were in inpatient care. The following psychodiagnostic techniques were used: the Toronto Cognitive Assessment TorCA, the MOCA and the MiniMult tests, Patient Social Functioning Questionnaire. Currently, a group of patients with cognitive decline cause by epilepsy is undergoing remote cognitive training on one of an online platforms, under our observation. Correction occurs throughout regular daily performance, assessment of cognitive functions is carried out on three indicators: attention, memory and thinking.

**Results:** The following results of the study were observed: initially decreased memory in 88,8 % patients and the level of cognitive decline were directly proportional to the duration of the illness, this category of patients has reduced activity and limited social contacts. The result of the use of cognitive training is an increase in all three indicators.

**Conclusions:** The results of the study indicate the need for further study of the features of cognitive disorders in epilepsy and the use of methods of psychotherapeutic correction.

**Keywords:** Epilepsy; Cognitive disorders

## EPP0817

### Psychological assessment of the cognitive development of children with IVF: The experience of neuropsychological approach

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**Introduction:** The first stage of interdisciplinary studying (EEG, IQ, immunology, psychology, neuropsychology) of cognitive development of children with IVF, conducting at the Mental Health Research Center (Moscow, Russia) is presenting. A small number of studies analyzing the cognitive development of children in a wide age range, determined the design of this study.

**Objectives:** Assessment of the capabilities of the neuropsychological approach in qualifying the cognitive development of children with IVF.

**Methods:** 20 children aged 7 to 15 years old, born with IVF, studying in school. Neuropsychological diagnosis according to A.R. Luria-L.S.Tsvetkova. All participants signed voluntary consent to participate in the study.

**Results:** 1. Neuropsychological approach and methods of neuropsychological diagnostics are effective in qualifying the neurocognitive development of children with IVF 2. The overwhelming majority of the examined children (90%) had energy factor dysfunction (at the level of brain stem structures in 65%, at the level of diencephalic structures in 82%, combined disorders at both levels in 52%) 3. Regulatory inhibitory control (impulse control - suppression of the dominant reaction) was impaired (functionally unformed) in 58% of the subjects 4. A gross violation of the kinetic

factor was found in 46% of the examined children and adolescents IVF 5. The development of speech and visual memory is variable.

**Conclusions:** The conclusions are preliminary and require testing on a wider sample of children born because of IVF and other assisted reproductive technologies. It is necessary to study the functional state of other neuropsychological factors, to expand the number of participants.

**Keywords:** IVF; Children; cognitive development; neuropsychology

## EPP0818

### Human umbilical cord blood infusions in management of autism spectrum disorder: Narrative review

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**Introduction:** According to CDC's Autism and Developmental Disabilities Monitoring Network surveillance in 2016, autism spectrum disorder (ASD) was prevalent in 1 in 54 children in 11 states of the US.

**Objectives:** This systematic review provides an overview of Umbilical Cord Blood Infusion (UCB) to decrease symptoms severity in children with (ASD).

**Methods:** Systematic literature search was conducted using "Autism" OR "Autism spectrum disorder" AND "Autologous Umbilical Cord Blood Infusion (AUCBI)" OR "umbilical cord blood" OR "Allogeneic Cord Blood" in PubMed, Embase, and PsycINFO. Three studies were qualified on AUCBI.

**Results:** We found 3 studies on UCBI. The UCB Infusion phase-I/ open-label trial showed significant improvement in cognitive and behavior scales, especially in the social domain in the first six months, and was more significant in children with higher baseline nonverbal intelligence quotients. Other study/phase II trial failed to show any effects of UCBI on social communication, vocabulary, and other autism symptoms. On subgroup analysis, the improvement in Clinical Global Impression - Improvement (CGI-I) in children without intellectual disability (ID) with the allogenic (not autologous) UCBI was observed. Another randomized, blinded crossover trial failed to show any difference between improvements in CGI baseline severity scores in placebo vs. cord blood infusion groups.

**Conclusions:** The data provides evidence to support the efficacy and safety of autologous UCBI in symptom severity reductions and improved clinical outcomes without intellectual disability. However, the evidence is inadequate and future large scale clinical are required.

**Keyword:** autism spectrum disorder