

## **Experience of using intravenous immunoglobulin for treatment of resistant forms of epilepsy in children**

Severe forms of epilepsy in children are distinguished by frequent polymorphic seizures, which are treated hard. Among these are all forms of epileptic encephalopathy and symptomatic epilepsies. In national guidelines there are instructions for using corticosteroids and immunoglobulin while treating severe epilepsy in children.

**The purpose of research:** To study the results of the intravenous immunoglobulin (IVIg) treatment of severe frequent epileptic seizures in children.

**Materials and methods:** During two years (2014-2015) 10 children with different severe forms of epilepsy at the age from 4 months old to 5 years old (average age - 1 year and 2 months), 6 boys and 4 girls, were under care of specialists. Forms of epilepsy: there were 3 children with symptomatic and cryptogenic West`s syndrome, 2 children with Othahara syndrome, 2 children with Lennox-Gastaut syndrome, 1 children with Dravet syndrome and 2 children with symptomatic epilepsy associated with neonatal asphyxia and further cerebral atrophy. Performed research of the children`s immune status did not detect deviations from the norm limits. Intravenous immunoglobulin in a dose of 1g/kg per course (during 5 days) was added to basic therapy (using of two antiepileptic drugs).

### **Results:**

Before in taking of intravenous immunoglobulin (IVIg) the children got different combinations of AEDs in maximally extended dosages, more often: valproates, topiramates, dexason, prednisolon, levetiracetam, carbamazepin, lamotrigin, phenobarbital, benzodiazepines, vigabatrin. But any combination of drugs did not allow decreasing seizures for 50% and more. That is why comparatively new approach with using of IVIg was offered for treatment. After the 5-day course of treatment with using of IVIg the following results were received: seizures were not marked in 3 children with cryptogenic West`s syndrome and Lennox-Gastaut syndrome (remission for the first time in their lives), seizures were decreased for 30-50% in 5 children and 2 children with cerebral severe atrophic changes did not react on the treatment. Bad effects of the treatment were not determined.

**Conclusions:** Intravenous immunoglobulin can be used as additional treatment for severe resistant cases of epilepsy in children.

Literature:

1.Epilepsy in children: the Unified Clinical Protocol of primary, emergency, secondary (specialized) and tertiary (highly-specialized) healthcare services/Order of the Ministry of Health of Ukraine from 17.04.2014 №276.