CLINICAL EVOLUTION OF CONVULSIVE STATUS EPILEPTICUS IN CHILDREN

Calcii Cornelia[1], Hadjiu Svetlana[1, 2], Istratuc Irina[1], Calistru Iulia [1] Feghiu Ludmila[1, 3], Revenco Ninel [1.2], Groppa Stanislav[1, 3]
[1]Medical state university „Nicolae Testemițanu”
[2]Hospital of Mother and Child Healthcare
[3]National epileptology center, Chisinau, Republic of Moldova

Introduction

Status epilepticus (SE) is the most common neurological disorder in children, being a condition resulting from the loss of the mechanisms responsible for ending convulsive access or from the initiation of mechanisms that cause an abnormal convulsive response.

Keywords

Status epilepticus, child, antiepileptic drugs

Purpose

The aim of the present study is an analysis of the evolutionary course of SE among children with "de novo" seizures and previously pre-established epilepsy, by studying the type of seizures, the EEG route and analyzing of the serum concentration of the antiepileptic remedies for SE prophylaxis in children.

Material and methods

A retrospective study, conducted by a single center, during the years 2015-2019. We included in the study 115 children with convulsive SE, aged between 1 month and 18 years, hospitalized in the Pediatric Intensive Care Unit of the IMSP Institute of Mother and Child. We analyzed the medical records to obtain variables related to demographic data and the types of crisis.

Results

From the total of 115 children with SE, 72 (62.6%) were previously diagnosed with stable epilepsy. Focal seizures were present in 32.1% of cases, and 33.04% required intubation; the mortality incidence was 3.4%. In children with previously established diagnosis of epilepsy, a pathological EEG was encountered more frequently (p <0.001). In 81% of children with pre-existing seizures, the levels of DAE were known, but 51.6% of them had sub-therapeutic levels.

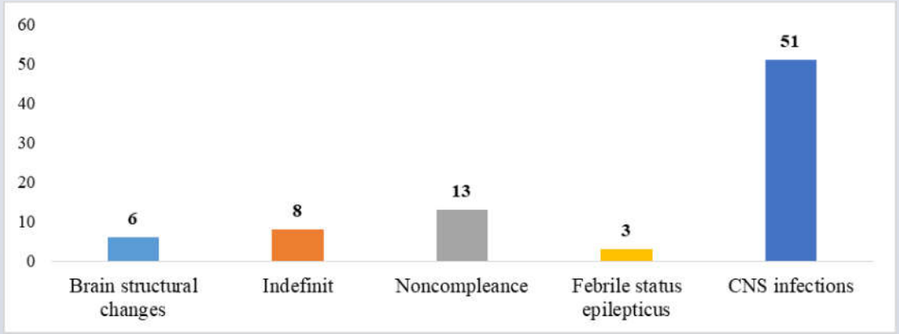

Fig. 1. Etiological factors for convulsive SE in children (%)

Conclusions

The most common disorder was stable epilepsy. Intubation was primarly used in patients with focal seizures. Subtherapeutic serum concentrations of antiepileptic remedies have been established more frequently among children with SE previously diagnosed with epilepsy.