

contributing factor. The use of prednisone could be an effective add on therapy in intractable epilepsy.

659

NEWBORN CONVULSIONS 2004-2009

M. Fejes¹, I. Velkey², T. Megyeri¹, J. Cservenyák², K. Váradi¹

¹Perinatal Intensive Centre, ²Childneurology, Borsod County Teaching Hospital, Miskolc, Hungary

The aim of the study was to introduce epidemiologic data of newborn convulsions and its outcome of our county's population.

Population and method: There were investigated 44 274 lifeborn newborns from 1st of January 2004 to 31st of December 2009 of Borsod County in Hungary. 47 of them had newborn convulsions (C). Therapeutic protocol was: 1st step: Diazepam; 2nd step: Loading phenobarbitone (20 mg/kg/day); 3rd step: Phenytoin (3x10 mg/kg/ 1st day) in some cases chloral-hydrate (25-75 mg/kg/doses maximum 2x/day) then the doses were decreased for maintenance doses.

Follow up examinations were done regularly 1-2 monthly. Statistical methods were mathematical mean, standard deviation and calculation of percentage.

Results: Characteristics of ill patients: gestational age 37,56±1,18 week, birth weight 3008,7±420,23 gram, Apgar 1' 8,19±1,13, Apgar 5' 9,1±0,88, mature/premature rate 36/11, male/female rate 24/23. The etiology was in a wide range: 13 asphyxia, 6 intrauterin infection, 5 familial, 4 patient 4th-5th day convulsions etc.

C incidence was 1,06/1000 lifeborn newborns. Status epilepticus (SE) was developed at 10 patients (inc.: 0,23/1000). 46,80% of all C was in the first five days. 60% of SE was observed on the 1st-2nd days. 3 babies died but not in the early period neither as a consequence of C and SE.

EEG abnormality was observed one third of C patients. Every cases of SE had disorders of EEG. 11 epilepsies were observed, 7 of them had been transient, 2 turned into therapy resistant epilepsy.

Conclusion: There were less convulsions and status epilepticus than in the literature. Classical therapeutic protocol was useful in the most cases.

660

PREVENTABLE NEUROREGRESSION-CASE REPORT AND LITERATURE REVIEW OF VITAMIN B12 DEFICIENCY

D.K. Gandhi, R. Jayatunga

Paediatrics, Sandwell and West Birmingham Hospitals NHS Trust, Birmingham, UK

Background: Vitamin B12 deficiency in infancy is a cause of a preventable neuroregression and complex neurological manifestations.

Case report: An 18 month male infant was admitted from an OP Community Paediatrician's clinic for gross pallor. The parents reported concerns regarding the darkening of his skin, losing motor skills and apathy going back 3-4 months. He was still exclusively breast fed although weaning was attempted on various occasions. He had gross pale, puffy hands and feet, hyper-pigmentation, tremors, apathy, variable tone and was developmentally behind. Investigations revealed pancytopenia, low vitamin B12, normal ferritin and folate and hypersegmented neutrophils and grossly abnormal MRI. His mother was vegetarian and had low B12 yet normal haematology. He had a very stormy course during treatment, developed severe autonomic dysfunction with bradycardia, hypertension, drooling and unsafe swallow on initiating treatment and had to be transferred to PICU. He eventually demonstrated increasing attention and motor abilities and discharged with follow up in clinic and CDC.

Discussion: There are various reports in literature which describe the many different neurologic manifestations in deficiency and during treatment in an exclusively breast fed infant with maternal B12 deficiency although not all of these are described in a single case.

Conclusions: Infantile B12 deficiency from maternal deficiency can cause permanent neurological damage. There should be better awareness during the antenatal period and in the prime care to avoid neonatal and infantile B12 deficiency. Can selective neonatal screening prevent the catastrophe? Treatment can result in paradoxical deterioration and therefore needs close monitoring.