

NEONATAL SEIZURES

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Gabriela Tavcioska - Perinatal Medicine

PATIENT HISTORY

Seven days old male newborn came at the department of pediatrics because (as his mother said) during the last two days he was upset, tearful and no feeding. Seizures occurred during the examination.

Facts from anamnesis:

Mother history: negative.

Family history of neonatal seizures: negative.

Pregnancy: irregularly controlled
(only one visit at gynecologist, no laboratory examinations, no screening for malformations), no infections during pregnancy, no use of drugs.

Labor and delivery: spontaneous delivery with head presentation and duration of 6 h with fetal monitoring, APGAR Scores 9/9, venous or arterial blood gas determinations are not available at our hospital.

Neonatal history: birth weight – 3050 g, birth length – 49cm, estimated gestational age – 40 GW, with stabile vital signs.

PHYSICAL EXAMINATION

Vital signs: heart rate 120/min, respirations 62/min

Fontanelle fullness: normal.

Limb movement: normal.

Muscle tone: normal.

Primitive reflexes: regular

Description of abnormal movements:

Clonic – tonic movements of all limbs.

Duration: 2 – 3 minutes

Unprovoked.

Occurred during awake state.

LABORATORY EVALUATION AND DIAGNOSTIC PROCEDURES

These examinations were done after initial treatment.

Hgb = 129 g/l PLT = 315×10^9 WBC = 9.8×10^9 RBC = 3.4×10^{12}
Htc = 38%

Sodium = 141 mmol/l Magnesium = 1.1 mmol/l Calcium = 2.6 mmol/l

Bilirubin total = 156 μ mol/l

Glycemia = 2.4 mmol/l

CRP = negative

Protein total = 69 g/l Albumin = 35 g/l

Rtg lungs: negative.

Head ultrasound: negative.

Rectal temperature: 37.3 C.

HOSPITAL COURSE

Newborn with seizures requires immediate treatment with initial attention to maintaining airway, breathing and circulation.

We treated our patient with:

Diazepam 0,3 mg/kg (rectal)

Glucose, 10% solution 2ml/kg (i. v.)

Phenobarbital 5mg/kg divided every 8 h (p. o.)

Monitoring of vital signs.

Seizures stopped after 2-3 minutes.

OUTCOMES

In our hospital there is an insufficiency of equipment especially sophisticated like EEG, CT, MRI.

We are limited in further treatment of patients and we have to send them to University children clinic in Skopje where they have a treatment on higher level.

WE REFERED OUR PATIENT TO CHILD NEUROLOGIST!

Algorithm for initial management of abnormal movements.



