



A clinical mystery

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Jana Barbieur (ASO kindergeneeskunde)

Dr. Barbara De Bisschop (Kinderarts-Neonatoloog, NICU ZAS Middelheim Antwerp)



OVERVIEW

- ✓ Case
- ✓ Discussion
- ✓ Take home messages



Case

- Term born baby boy (GA 37w6d, BW 2550g=p10)
- Cesarean section fetal distress & non-progressive labor
- GIPIA0, uncomplicated spontaneous pregnancy, normal ultrasounds
- APGAR 9/10/10, admission maternity ward

**12 HOURS
LATER**



'I think this newborn doesn't feel well'



A: free

B: apneas + desaturations, no respiratory distress

C: bradycardias during apneas, CR2s, good perfusion

D: irritated newborn



What would you do now?

X ray thorax



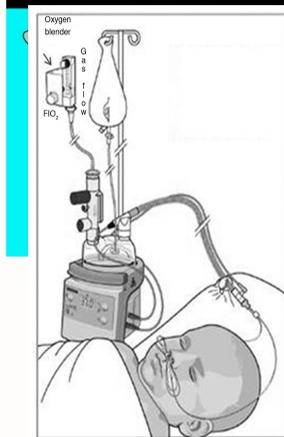
Charging dose
caffeine

Start respiratory
support

Blood sampling for
CRP/blood count



What would you do now?



SQUARE CRP elevated

Normal blood count

First temp: 38,1°C

GBS-, no prolonged ruptured membranes



Next step

Start IV antibiotics

Watchful waiting

Metabolic disease screening



Lumbar puncture



Evolution

- STOP oxygen day 3 of admission
- Spontaneous meconium – diuresis
- Bottle feeding without problems
- Persistent need for boundaries and varying irritability



Until suddenly on day 3

- Repeat episode of apnea – desaturation – bradycardia
- Needs stimulation



What would you do now?

aEEG + transfontanel
ultrasound



Watchful waiting

New dose caffeine

Cardiac ultrasound



Convulsions!

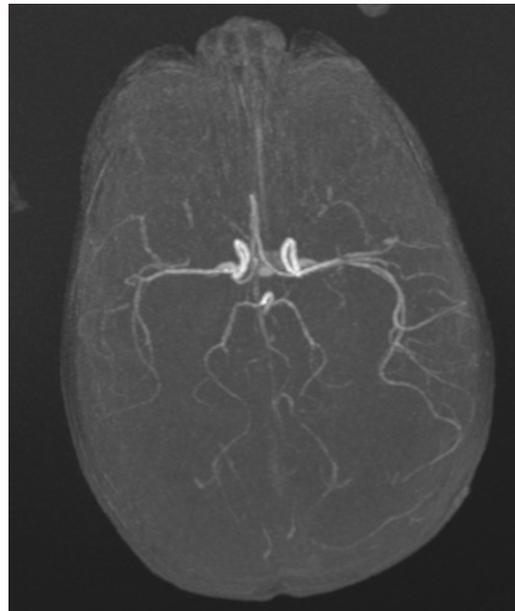
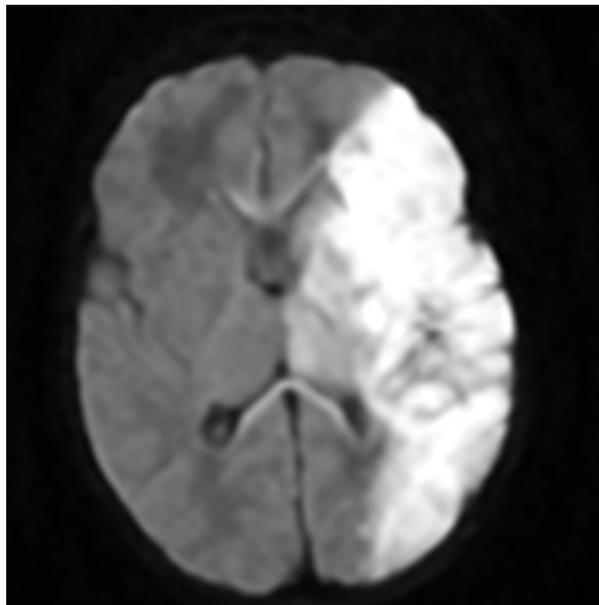
- aEEG suggestive for convulsions R/ fenobarbital
- Transfontanel ultrasound: suggestive for cerebral infarction
- Cardiac ultrasound: normal



- MRI scan next day:

A Clinical Mystery

A CEREBRI MEDIA INFARCTION



Neonatal arterial ischaemic stroke

- Most often left A cerebri media
- Etiology unclear
- Risk factors: maternal intrapartum fever, PE, forceps, emergency C section. Asphyxia, hypoglycaemia.
- Symptoms: asymptomatic or atypical (convulsions, apnea, feeding difficulties, altered consciousness).
- Treatment: supportive (seizure control)
- Outcome: 1/2 language impairment, 1/3 CP, 1/3 mental retardation



Take home messages

- Pattern recognition.
- Neonatal arterial ischaemic stroke often is asymptomatic or presents with atypical symptoms.
- **ALWAYS** think of aEEG for neonates with unexplained apneas, even though reactive to caffeine,





Ziekenhuis aan de Stroom
[ZAS] is het netwerk van
ZNA en GZA Ziekenhuizen

