Congenital hydrothorax

Case presentation

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History of the mother

- 23 years old primipara, primigravida
- I.U transport to the perinatal center in GA of 31 w because of fetal hydrops
- HBsAg negat, AFP was not measured,
- during the I.trimester viral infection treated by ATB
- Dexamethason was given during 3 days
- Augmentin for vaginosis before delivery
- Normal delivery in GA of 35 week

Physical examination of the baby

- Severe asfyxia Apgar 2,3,4, BW 2550g 45cm
- Intubation and suction in delivery room
- Oedema of the glottis
- Severe hydrops, bad circulation, not measurable BP, StcO2 15..25%, HR 60/min, Epinephrine ET
- in age of 20 minutes after transport to NICU StcO2 19%, still not measureble BP, body temperature 34.5 °C

Where are our limits...



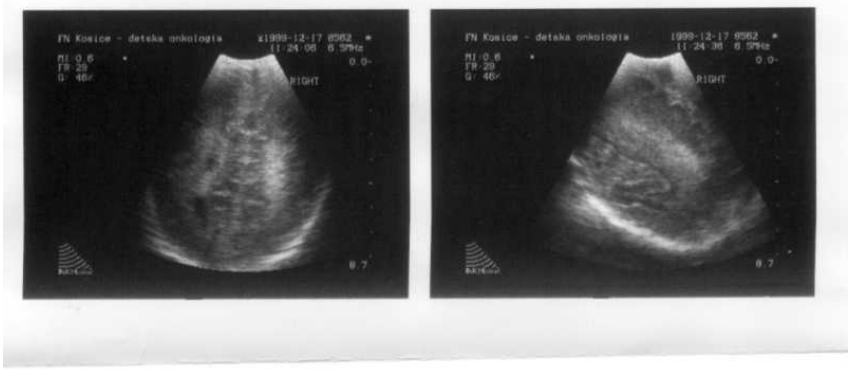
After ultrasound ...

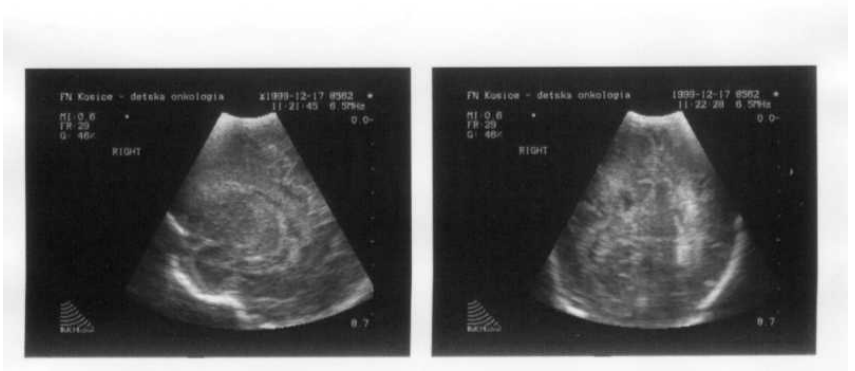
- Urgent bedside ultrasound - severe hydrothorax, lungs are 2x3 cm in both sides
- We released the urgent punction of pleural spaces and suction of the fluid - 60 and 80 ml from both sides
- After suction the level of StcO2 is going up to 100%, we can to decrease the IPPV and we can go down with FiO2 from 1.0 to 0.5

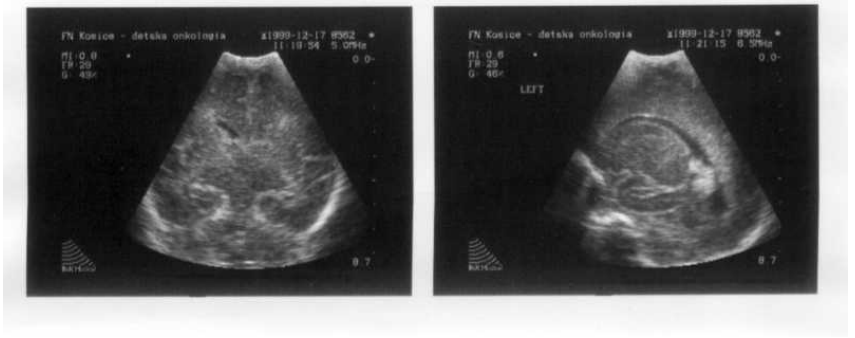

WARNING:

Ultrasound of the chest in age of hours with pleural fluid









Ultrasound of the brain {right} with right side periventricular ischemic hyperechogenicity. Later we did not find cPVL.

Laboratory data after delivery

- Normal Hb17,4 Htk 0,56 Leu 13,5 Trc 261.10/9
- Biochemistry with 35,0 g/l of proteins, albumin 21,4 g/l K 7,7 mmol/l , Na 144 mmol/l , Cl 102 mmol/l Urea 4,3 mmol/l Kreatinin 80 umol/l AST 0,65 ALT 0,11 ukat/l IgG 3,92 g/l IgM 0,1g/l
- Transudate form the pleural space Na 120, K 3,5 , Cl 85 mmol/l , Proteins 24,5 g/l, Urea 6,4 mmol/l Cholesterol 0,94 mmol/l Triglycerides 0,01 mmol/l
- All basal renal function GF, TR normal,







Different opinions about possible positive effect of exogenous surfactant…bad economic situation…only??

- No future
- If successful then severe cerebral palsy
- No surfactant
- We are loosing money
- Why do it ?

90 %
of staff

- Who knows the future…our screening is negative for cong.
- Surfactant - expensive but could help -PPHN
- Normal brain scan…
- We can learn...

10 % of
staff

No comment...



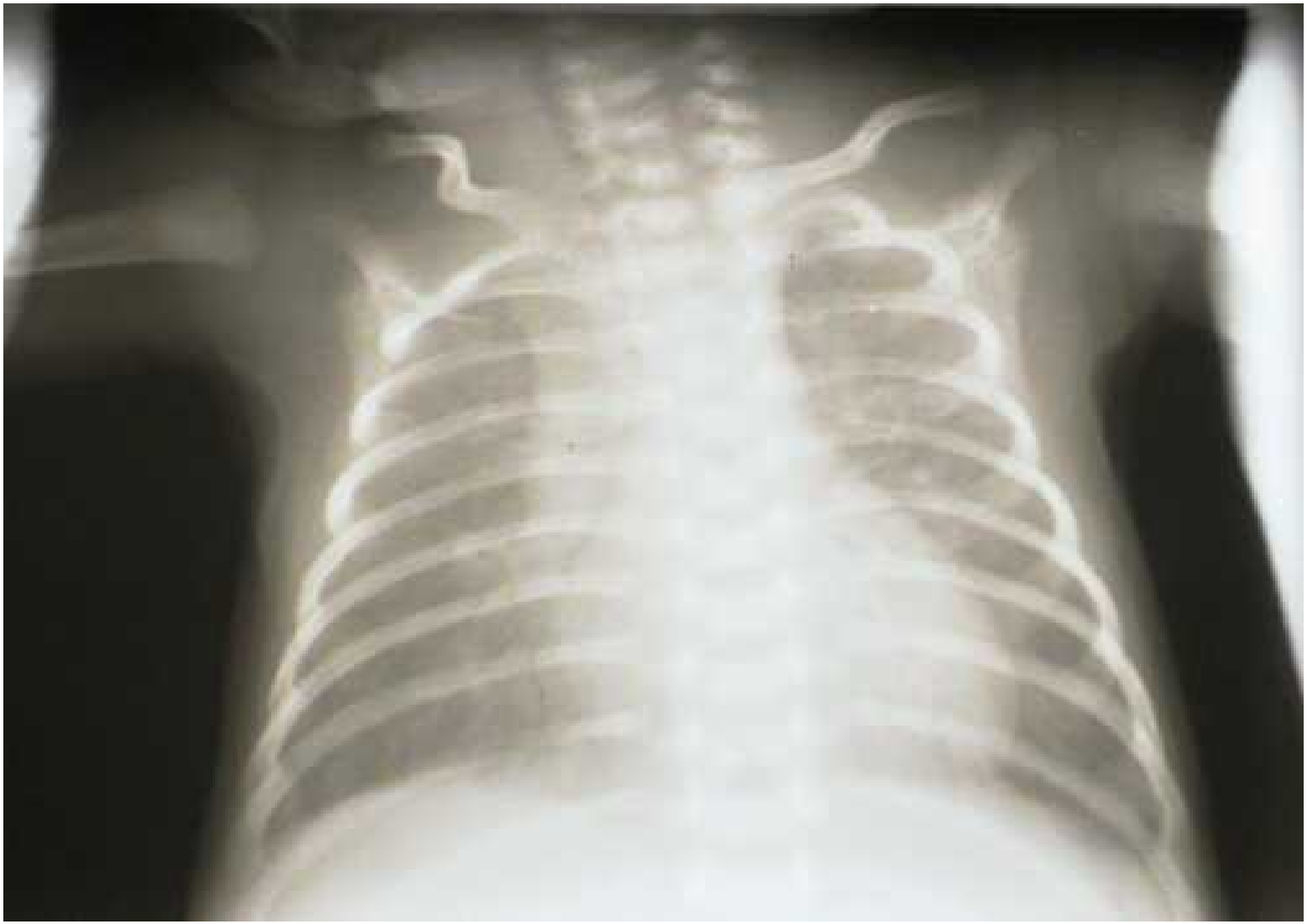
Severe problems...



Atypical methods of extubation

- Permanent higher pCO2, very slow closure of PDA , Indomethacin only two dosis

- after the stop of pleural secretion, we decreased the PIP, increased the rate to 120/min with short Tin 0,28, then switch to ET CPAP for a short time and extubated



But good results...



We are going home...





Six month later

Questions

- Not clear etiology
- NO was indicated for typical PPHN problems, but we have no possibility
- The neurologic status was better after physiotherapy, what will be the future in such cases...
- We definitively must to always try to treat such severe cases...

Different opinions about possible positive effect of exogenous surfactant…bad economic situation…only??

Answers…

- No future No
- If successful then severe cerebral pulsy No
- No surfactant
- We are loosing money No
- Why to do it ?
  Definitevely we must to try it
  90 % of staff was not right

- Who knows the future…our screening is negative for cong.
- Surfactant - expensive but could help -PPHN
- Normal brain scan…
- We can learn...
  10 % of staff was right

Comment

- In age of 6 month excellent neurologic condition
- Followed because of mild pulmonary stenossis by cardiologist but without neccessary invasive interventions
- PDA is closed in age of five months
- ... Thanks baby ...