(24.57-34.14) weeks of gestation. Median of birth weight was 1175 (575-1490) grams. We measured plasma and urine osmolality and 24 hour urine volume to calculate free water clearance (FWC) for each infant. If FWC was less than 30 ml/kg/day the infant was classified as having a DFT.

Results: There were 38 (51.4%) infants with an abnormal FWC (AFWC) in the study population. The median duration of observed DFT period was 14 (4-44) days. The gestational age at birth was lower for AFWC infants compared to infants with normal FWC (NFWC), 28.29 (24.57-32.86) vs. 30.00 (25.57-34.14) weeks ($p=0.001$). AFWC infants also needed longer ventilator treatment, 2 (0-23) vs. 0.50 (0-23) days ($p=0.046$), nCPAP treatment 30 (0-100) vs. 3 (0-41) days ($p<0.0001$) and longer oxygen supplementation 22 (0-74) vs. 47 (0-163) days ($p=0.011$) than NFWC infants.

Conclusions: Decreased fluid tolerance seems to be frequently connected with exacerbation and prolongation of pulmonary problems in VLBW infants. Fluid restriction might be a more beneficial treatment than diuretics in VLBW infants with prolonged respiratory problems and DFT.

432

EFFECT OF INFANTS' POSITION ON SERUM BILIRUBIN LEVEL DURING CONVENTIONAL PHOTOTHERAPY

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Background: Alternating exposure of front and back of infants during phototherapy is widely practiced.

Aim: Compare rate of decline in total serum bilirubin concentration (TSB) during phototherapy in infants treated in supine position throughout versus infants alternating between supine and prone position every 3 h. Further, survey current practice in two Scandinavian countries.

Methods: 112 infants with gestational age above 32 weeks, healthy except for non-haemolytic hyperbilirubinaemia, were randomised to one of the treatment groups. TSB was measured at start-up and after 12 and 24 h of therapy. Transcutaneous bilirubin concentration (TcB) was measured mid-sternum in a subgroup of 10 infants including both groups. A questionnaire about routines for position changes during phototherapy was sent to all 41

neonatal departments in Denmark and Norway.

Results: No significant differences in decline of TSB were observed between the two treatment groups: After 12 h of therapy TSB had decreased 32% in both groups and after 24 h 49% and 50%, respectively. TcB decreased rapidly during the first 150 min of treatment and approached a plateau at 35% of the initial level. In two thirds of Danish and Norwegian departments infants were routinely turned during phototherapy, most often every 3rd h.

Conclusion: No difference in the decrease of TSB was observed whether the infants were turned during phototherapy or treated in supine position throughout. An explanation for this lack of effect of turning infants might be that photobilirubins are mainly produced in the intravascular space. Alternating exposure during phototherapy is widely practiced in Scandinavia.

433

MATERNAL CHORIOAMNIONITIS AND ITS IMPACT ON EARLY MORBIDITY OF VERY LOW BIRTH WEIGHT INFANTS

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Objective: To evaluate the impact of chorioamnionitis on early morbidity in very low birth weight infants (VLBW) in a retrospective study.

Methods: 245 VLBW were admitted at the Neonatology Department within the years 2007-2009. The placentas were examined histologically for the presence of acute chorioamnionitis in deliveries of 215 VLBW who were eligible for the study. The incidence of *bronchopulmonary dysplasia grade 2 (BPD2)*, *disorders of gastrointestinal tract* (necrotizing enterocolitis, malabsorption syndrome, ileus of prematurity) and brain injury (intraventricular haemorrhage grade III, periventricular leucomalacia, and posthaemorrhagic hydrocephalus) was compared statistically in subgroups with proven chorioamnionitis and without it.

Results: The group included 215 subjects in total, 110 (51,5%) male and 105 (48,8%) female, with mean birth weight 1069g (range 405-1490g), mean gestational age 28,5 weeks (range 23-36 wks). There were no significant differences in gestational