in CS group (-10.2%) than that in VD group (-7.8%). Exclusive breastfeeding rate in hospital was lower in CS group (53.6%) compared with VD group (69.9%). However, breastfeeding rate at the hospital discharge was not significantly different between VD group (85.2%) and CS group (83.6%), and neither was that at 3-month-old checkup between VD group (70.8%) and CS group (66.7%),

Conclusion: Nearly 70% of breastfeeding rate was sustained by continuous breastfeeding support for healthy term infants until 3 months old in any mode of delivery.

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RISK OF BRONCHOPULMONARY DYSPLASIA (BPD) IS INCREASED AFTER SURGICAL LIGATION OF DUCTUS ARTERIOSUS IN PRETERM INFANTS

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Background: Patent ductus arteriosus (PDA) with significant left to right shunt in preterm infants increases morbidity and mortality. Treatment modality can affect neonatal morbidities.

Objective: To determine whether surgical ligation of PDA increases neonatal morbidities and mortality compared with other treatment modalities in preterm infants with symptomatic PDA.

Design/methods: A total of 128 infants (25⁺36⁺6wks, 620 3710g) diagnosed as symptomatic PDA were grouped by treatment modality: Conservative group(n=36), INDO group(n=73) and OP group(n=19). We analyzed relative risks of NEC(> S2), BPD(> moderate), intraventricular hemorrhage (IVH;> G3), ROP(> S3 or operation) and BPD/death by treatment modality by multivariate logistic regression after adjustment for gestation and HMD.

Results: Gestation and birth weight were lower in OP group(29 2.5wk 1062 275g) compared with Conservative group(32 3.6wk, 1842 728g) and INDO group(30 3.2wk, 1322 462g); HMD and ventilator duration were significantly increased in OP group, but mortality were similar between groups. In multivariate analysis, OP group shows increased

risks of BPD, OR 62.7 (95% CI, 5.97,657.2, p=0.001) and BPD or Death, OR 21(95% CI, 3.9,114.8, p=0.001); In INDO group, no associations with NEC, ROP, IVH, BPD and BPD/Death..

Conclusions: Since the risk of BPD was increased after surgical ligation of PDA but not with INDO therapy, surgical ligation may not be the preferred initial treatment for symptomatic PDA in preterm infants. In the case of OP group, it is possible that factors leading to the choice of surgery or prolonged ductal patency may influence outcome.

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LOW COMPLIANCE WITH GUIDELINES FOR RESPIRATORY SUPPORT OF PRETERM INFANTS AT BIRTH

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Objective: To investigate the compliance of clinicians with guidelines for respiratory support of preterm infants and to identify bottlenecks.

Methods: Respiratory interventions at birth in preterm infants born at the Leiden University Medical Center were observed by an independent researcher. Video recordings and recordings of airway pressure, gas flow, heart rate and oxygen saturation were reviewed with the resuscitator and compared with Dutch neonatal resuscitation guidelines.

Results: In 34 infants (mean (SD) gestational age 30.6 (3.2) weeks, birth weight 1292 (570) grams) respiratory interventions were: 8/34 (23%) none given, 3/34 (9%) continuous positive airway pressure (CPAP) and 23/34 (68%) mask ventilation followed by CPAP (6 were intubated later on). Review of the recordings showed that respiratory support was not in accordance with guidelines in 25/34 (74%) infants. In 14/34 (42%) infants choice of support was not as recommended: 6 infants received no respiratory support despite insufficient breathing and bradycardia, 2 received CPAP despite prolonged apnea, 4 received mask ventilation although breathing and heart rate were adequate and 2 infants were intubated despite sufficient breathing and adequate saturation and heart rate. In 5/23 (22%) mask ventilated infants no initial sustained inflations were given. 18/23 (78%) infants received initial sustained inflations, but 9 different