

indications were small bowel atresia (16.1%), oesophagus atresia (14.3%), omphalocele (10.7%), meconial ileus (7.1%), imperforate anus (7.1%), gastroschisis (7.1%). Odd ratio for developing cholestasis after surgery was 14.31 (IC95 [6.64-30.85]). Cholestasis resolved in all cases.

Prematurity, SGA, perinatal asphyxia, early neonatal respiratory distress, secondary sepsis, PN > 7 days, time allowed for enteral intakes > 100 kcal/kg/d, IV lipids, proteins and glucids were significantly associated with cholestasis ( $p < 0.05$ ).

In multivariate analysis, cholestasis was associated with SGA (OR 7.64; IC95 [1.47-39.85]).

**Conclusion:** Surgical neonates have a high risk for the development of cholestasis and additional risk factors, such as being SGA, should be considered.

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**GASTRIC ASPIRATE SHAKE TEST FOR PREDICTING OF SURFACTANT THERAPY IN PREMATURE NEONATES WITH HYALINE MEMBRANE DISEASE**

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**Background and aims:** In order to rapidly and reliably identify surfactant assessment of neonates with Hyaline Membrane Disease (HMD), the Gastric aspirate shake test (GAST) evaluated in such neonates.

**Methods:** 81 neonates with gestational age less than 34 weeks enrolled to study (51 healthy newborns and 31 newborns with HMD). The clinical characteristics of HMD considered as the gold standard of diagnosis. About 1 ml mixture of normal saline (0.5ml) and stomach contents were collected within 30 minutes of birth (0.5ml) were shaking for 15 seconds into a glass tube. Then 1 ml of 95% ethanol was added and tube agitated for a further 15 seconds. After a waiting time of 15 min, if no bubbles were present, the test was NEGATIVE (very little surfactant). If bubbles were seen around the top of the fluid, the test was INTERMEDIATE (only some surfactant). If bubbles were present right across the surface of the fluid, the test was POSITIVE (adequate amounts of surfactant).

**Results:** All infants who developed HMD had negative or intermediate test results. The GAST had a specificity of 66%, sensitivity of 100%, positive predictive value of 64.5% and negative predictive value of 100% for developing HMD. The sensitivity and specificity of the GAST for prediction of surfactant requirement in HMD patients were 100% and 64.8%, respectively, with a positive and negative predictive value of 62.5% and 100%, respectively.

**Conclusion:** GAST within 0.5 hour of delivery is a rapid and simple procedure for rule out of HMD and surfactant requirement.

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**DOES SERUM TROPONIN I CORRELATE WITH SEVERITY OF HYPOXIC ISCHAEMIC ENCEPHALOPATHY?**

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**Background:** Myocardial dysfunction occurs frequently in babies with perinatal asphyxia. Cardiac Troponin I (cTnI) is a surrogate marker of myocardial dysfunction in adults but there are few data from neonates. We aimed to compare serum cTnI concentrations in asphyxiated neonates with clinical severity of encephalopathy.

**Methods:** Retrospective review of cTnI concentrations in neonates admitted to a tertiary neonatal unit with hypoxic ischaemic encephalopathy (HIE) in the 63-month period January 2005 to March 2010. We compared serum cTnI concentration measured in the first 48 hours postnatal with clinical grade of HIE (Sarnat-Sarnat classification), and also with duration of inotropic support.

**Results:** 42 neonates were admitted with HIE in the study period. Median gestational age and birth weight were 38.8 (37.4 to 40.1) weeks and 3012 (2540 to 3285) grams. The table shows their cTnI concentrations and duration of inotropic support according to HIE grade. Data are median (95% CI)