2. Considering rSO_2 more depends on circulatory sufficiency then FiO_2 it is expedient to use such a definition as 'oxygenous price of saturation'. In that case using of Doppler estimation of cerebral blood flow pattern allows differing mixed hypoxia and cerebral ischemia aiming to choose proper ways of intensive care.

PO-0478 | MULTI-ORGAN DYSFUNCTION SCORING IN NEONATAL ENCEPHALOPATHY

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Background Neonatal encephalopathy secondary to perinatal asphyxia in term infants commonly results in multi-organ dysfunction (MOD). However methods to accurately and objectively quantify the degree of MOD in NE are lacking.

Objective To develop a scoring system which accurately reflects the degree of MOD in NE and to assess the ability of this score to predict outcome.

Methods Eighty-five term infants with NE were recruited. A score was assigned to abnormalities in each organ system (n = 6) with a maximum score of 15. E.g. In the cardiovascular system, Troponin-T > 0.1 ng/ml = 1, HR <80 = 1. The higher the score assigned, the more significant the MOD. Scores were compared with outcomes of grade of encephalopathy/mortality.

Results Eighty infants had data for all the scoring variables and were included. Higher MOD scores were significantly associated with grade II/III NE (p-value <0.001) and with mortality (p < 0.001) although numbers were small (n = 4). ROC analysis showed that the MOD score was highly predictive of grade II/III NE with AUROC curve = 0.94 (p < 0.001) and cut-off value for best prediction of this outcome was 4.5. For prediction of mortality, AUROC curve was 0.96 (p = 0.002) and cut-off value was 10.5.

Conclusion A scoring system that accurately reflects the degree of MOD in NE would be helpful and allow more objective assessment and comparison of these infants. The proposed MOD score needs to be prospectively validated in term newborns with NE. However it appears that our MOD score in NE is highly predictive of grade II/III NE and mortality.

PO-0479 | EARLY SCREENING FOR AUTISM SPECTRUM DISORDERS (ASD) IN PRETERM INFANTS: CORRELATION WITH PERINATAL DATA AND PREDICTIVE VALUES

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Background Prematurity increases the rate of ASD. Therefore preterm infants should be screened for it. Screening tests are designed for 24 months onwards. However, some traits of ASD are present at an earlier age and early intervention seems to improve prognosis.

Aims (1) Study the prevalence of ASD at 12 and 24 months postmenstrual age. (2) Compare results at both ages. (3) Explore correlation with perinatal data.

Methods Infants born <33 weeks. At 12 months, parents completed a questionnaire (CSBS-DP), which measures three areas: Communication, Expressive Speech and Symbolic abilities. At 24 months they completed the CSBS-DP and another questionnaire (M-CHAT). Results were compared at both ages and were correlated with neonatal morbidity data.

Results Correctly questionnaires were obtained in 121 infants at 12 m and 43 infants at 24 m. Mean gestational age (GA) was 29.31 weeks (SD 2.39). At 12 m, 19% infants had abnormal total scores (Communication 15.7%, Speech 25%, Symbolic 20.7%). At 24 m, 16.7% had abnormal scores (Communication 23.8%, Speech 21.4%, Symbolic 14.3%), and 24.3% abnormal M-CHAT. Rate change from 12 to 24 m was significant for Communication (p = 0.006). PPV ranged 0.81–0.91 and NPV 0.31–0.60. Abnormal results correlated with umbilical artery pH <7.15 (p = 0.034), Apgar scores <7 at 5 min (p = 0.035), twin pregnancy (p = 0.049), abnormal brain scans (p = 0.005), surgery (p = 0.027) and a trend with male gender and lower GA.

Conclusions The CSBS-CP questionnaire correlates with neonatal morbidity. It shows a high PPV although a variable NPV when compared at 24 m. It seems a good early screening, although a close follow-up is always needed.

PO-0480 | PRENATAL EVALUATION AND POSTNATAL EARLY OUTCOMES OF FETAL VENTRICULOMAGALY

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Objective This study aims to determine the incidence, aetiology, diagnostic criteria and early outcomes of prenatally diagnosed fetal ventriculomegaly (VM).

Methods Diagnostic criteria for the fetal VM was atrial diameter of lateral ventricle measuring ≥ 10 mm, independent from gestational age. Results of our patients from ultrasonography (USG), karyotyping, congenital infections, and associated abnormalities were noted. Progress during pregnancy, postnatal USG results and outcomes after birth were recorded.

Results In our study, 40 cases of fetal VM were recorded. Female to male fetus ratio was (19/21) 0,90. Median gestational age at detection of VM was 22 weeks (ranging between 16–34 weeks). Sixteen of the 40 VM cases were bilateral (40%), 24 of the 40 VM cases were unilateral (60%). Twenty-one VM cases were isolated (52.5%), there were associated structural abnormalities in 19 of the 40 VM cases (47.5%). One case was complicated by toxoplasmosis (1/40) (2.5%). Nineteen of the 40 VM cases had amniocentesis (47,5%) and 2 of them showed abnormalities (10.5%). Twenty four of the 40 VM cases were improved and returned to normal during pregnancy (60%). Eight pregnancies were terminated (8/40) 20%). Three babies passed away during neoanatal and postneonatal period. Six babies classified in our mild "isolated" VM class were found to have some structural abnormalities after birth.

Conclusions Our report revelaed that associated abnormality incidence and termination rate among mild VM cases were high. Although most of mild VM cases are thought to be benign,