in developmental vascular patterning in humans. NEATc4 expression decreased significantly and NEATc2 expression remained unchanged, requiring further research. These results suggest that NEAT is involved in fetal vascular development.

1701 Doppler Echocardiographic Evaluation of Pulmonary Artery Pressure in Low Birth Newborn With Abdominal Compartment Syndrome After Abdominal Surgical

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In this prospective study 16 newborns (ranging 1 day - 28 day) with severe compartment abdominal syndrome were evaluated by Doppler echocardiography for the presence of pulmonary hypertension (PH). The goal of this study was to determine the frequency of PH in newborn with severe compartment abdominal syndrome because the diagnosis of PH influenced the treatment of pneumonia in these newborns.

The patients who had more than 25.4±1.2 mmHg (mean ± SD) of systolic pulmonary arterial pressure were considered to have PH. In our study PH was found in 13 (81.25 %) of 16 newborn. We did not find any significant difference for the parameters including the age, weight, height, clinical symptoms, signs (tachycardia and tachypnea), and laboratory findings such as hemoglobin, PCO₂, HCO₃ and PO₂ between the patients with and without PH (p=0.01). However, there was a significant difference in cyanosis, cardiac failure, blood pH level, intra-abdominal pressure and O₂ saturation measured by pulse oximetry between the patients with and without PH (p=0.01).

1702 Increase Plasma Endothelin-1 Levels Are Associated With Lung Hypertension in Low Birth Newborns With Omphalocele

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Objective Increased pulmonary vascular resistance in low birth newborn with omphalocele is suggested, and endothelin-1 plays an important role in pulmonary vascular reactivity in newborns.

Methods We determined plasma (second sample) levels of endothelin-1 in 12 low birth newborns with omphalocele and 14 without omphalocele (gestational ages: 26.2±1.4 and 25.4±1.6 weeks, respectively). Blood and a second blood sample taken 18 to 40 hours after birth were used for endothelin-1 determination by enzyme immunoassay.

Result Plasma levels ET-1 concentrations were higher than second sample ET-1 levels in both groups (p=0.001). There was a significant positive correlation between second sample ET-1 and SNAPPE II (r = 0.32, p=0.01). There were no correlations between plasma ET-1 levels first sample and second sample ET-1 concentrations and 5-min Apgar score < 6. Duration of mechanical ventilation had a significant positive correlation with second sample ET-1 (r = 0.46, p=0.02). Plasma level ET-1 levels did not differ between control and omphalocele (13.0 and 14.6 pg/mL, respectively, p=0.80). Second sample ET-1 levels had significantly higher ET-1 levels than controls (1.32 and 6.04 pg/mL, respectively, p=0.001).

Conclusion Our low birth newborn with and without omphalocele had similar plasma ET-1 levels, whereas ET-1 levels were higher in omphalocele than in control newborns 18 to 40 hours after birth. The increased vascular resistance in omphalocele may be related to high ET-1 levels.