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**"INCIDENCE, CLINICAL PROFILE AND OUTCOMES OF
PULMONARY HYPERTENSION AMONG CHILDREN IN TERTIARY
CARE HOSPITAL OF COASTAL KARNATAKA"**

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INCIDENCE, CLINICAL PROFILE AND OUTCOMES OF PULMONARY HYPERTENSION AMONG CHILDREN IN TERTIARY CARE HOSPITAL OF COASTAL KARNATAKA

Abstract:

Background: Pulmonary hypertension (PH) is progressive condition impairing primarily the lungs, results from increased flow through the pulmonary vessels. PH is now described as mean pulmonary artery pressure >20mmHg by catheterization, a reduction from the earlier established definition of m PAP >25mmHg. (1)

Objectives: Aim of the study was to evaluate the Incidence, Clinical Outcomes and echocardiographic parameters of children with pulmonary hypertension. Also, to compare various Echocardiographic parameters to comment on clinical severity and evaluate the correlation between echocardiographic parameters & NT pro BNP.

Methods: During the study recruitment period, 905 neonates were admitted to NICU out of which 43 patients diagnosed with PH was enrolled for the study. 24(55.8%) of them were diagnosed with PH due to CHD and 19(44.2%) were diagnosed with PPHN. The mean gestational age at birth of the subjects was 39.0±1.22 weeks.

Results: Echocardiographic parameters like PAAT/ET, RV free wall TDI velocity, TAPSE, RV base to apex ratio and D duration were significantly lower in Non survivors than the survivors, p value <0.05. In the present study S/D ratio showed statistical difference between PH-CHD and PPHN with p value <0.05, whereas RV b/a ratio did not show much difference between PPHN and PH-CHD groups. In the present study PAAT showed significant negative correlation with NT BNP. Also, PAAT/ET was significantly lower in non survivors compared to survivors (0.25±0.02vs 0.28±0.05). PAAT/ET values was reduced in the PPHN group (0.24±0.03 vs 0.29±0.04). Statistical significance was noted when TEI index value was compared between the survivor and the non-survivor groups. Incidence of sepsis (50%) was more among the non-survivor group, which was statistically significant.

Conclusion: In this study our findings suggest that, Echocardiographic variables were significantly abnormal in the non-survivor group thus indicates that these variables are associated with disease severity and clinical outcomes. The number of survivors and the patients who were hemodynamically improved at the end of discharge were more among the PH-CHD group, implying that, comparatively PPHN has poor clinical outcomes.