PP-011 STUDY ON THE CONGENITAL HEART DEFECTS IN CHILDREN

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Aim Congenital heart defects represent an important health problem. The assessment of congenital heart defects (CHD) in children

Material and Method We carried out a retrospective study on congenital heart defects (CHD) in children admitted in the 2nd Pediatric Clinic of the Emergency County Hospital in Craiova, in 2021. We focused on the affectation according to: age groups, sex and social environment, CHD type, age when diagnosed, maternal/fetal risk factors, birth weight, feeding method, anthropometric parameters, associated affections, and hospitalization period. associated anomalies.

Results We registered a number of 58 cases of CHD. CHD frequency: according to sex – male/female: 36/22; social environment - urban/rural: 30/28. Distribution according to age groups: 0–1 years 62.1%, 1–3 years 8.6%, 3–6 years 15.5%, 6–16 years 13.8%. 31% of the cases presented carential/ferriprive anemia, 12.2% dystrophy. Most CHDs were non-cyanogenic 86.2%; the rest of them were cyanogenic (tetralogy of Fallot), vascular and obstructive anomalies, complex CHD. We registered the presence of Langdon-Down disease in 2 cases.

Conclusions CHD frequency within the general pathology was 6.5%; it prevailed in the age group between 1 and 12 months; we did not register any difference among the social environment and sex; most CHDs were non-cyanogenic

PP-012 PREDICTABILITY OF CENTRAL VENOUS TO ARTERIAL CO2 DIFFERENCE TO LOW CARDIAC OUTPUT RELATED OUTCOMES IN CHILDREN WITH CARDIAC SURGERY

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Aim Evaluate the association between VACO2 and poor LCOS-related outcomes in children who underwent cardiac surgery and the correlation of the VACO2 with others bedside surrogates (lactate and oxygen extraction ratio; O2ER)

Material and Method A prospective cohort study was conducted in children aged 0–18 years old with cardiac disease who underwent open cardiac surgery with CPB. Arterial and venous blood gas were collected at time of PICU admission and at 6, 12, and 24-hours post operation. The poor LCOS-related outcomes consisted of two out of five criteria: clinical LCOS, laboratory LCOS, vasopressor-inotropic score $\geq$ 20, serious interventions, and an ejection fraction <50% on echocardiography

Results From August 2021 to August 2023, 107 children had cardiac surgery. Seven patients were excluded from the study, leaving 100 patients for final analysis. The median age was 30.1 months (3.3, 56.9) and 27.0% (27/100) had a Risk Adjustment in Congenital Heart Surgery $\geq$ 3. The lactate was only the bedside parameter that showed significant differences between patient with and without poor LCOS related outcomes, while there were no differences of VACO2 and O2ER values between 2 groups. The VACO2 was not correlated with lactate at all timepoints but had fair-to-weak correlated with O2ER at PICU admission and 6-hour post operation (R2 = 0.41; p < 0.001, R2 = 0.58; p < 0.001, R2= 0.15; p = 0.15, R2= 0.29; p = 0.01 at 0, 6, 12, 24 hours post operation, respectively).

Conclusions Central venous-arterial CO2 difference has fair-to-weak correlation with O2ER but not lactate. The higher gap of VACO2 did not associate with poor LCOS-related outcomes, including other morbidities and mortality. This study still encourages to apply lactate level for hemodynamic monitoring in children after cardiac surgery.

PP-013 ULTRASOUND GUIDED CENTRAL LINE INSERTION IN LEVEL 3 PICU IN NORTH INDIA

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Aim Ultrasound guided central line insertion in pediatric intensive care unit - experience from North India

Material and Method After ethical clearance we evaluated ultrasound guided central line insertion over period of 12 months in level 3 PICU in a study period 2021–2022.

Results Out of total 105 patients, majority were in the age 1–5 yrs (32.4%), 30 (< 1 year), 20 (6–10 yrs) and 21 (> 10 yrs) of age. Majority of children (63) were discharged, 21(20%) took discharge against medical advice and 21 died during hospital stay. In the primary system involved, most common system involvement was CNS in 27 patients (25.7%), followed by respiratory in 11(10.5%) and sepsis in 11(10.5%). Central line indication in majority of patients was need for inotropic support. Inotropes were needed in 89 (84.8%) children out of 105. Fifty eight patients had single inotropic support compared to multiple inotropes needed in 31 children. Most common site was femoral in 51(48.6%) patients, followed by internal jugular vein in 39(37.1%) and subclavian in 11(10.5%). Most common central line dimensions used were 4 Fr 8 cm which was used in 59(56.1%) patients. Only 5 patients had swelling associated with CVL at local site. One patient had intra cardiac fungal vegetations. One patient had CRBSI(central line related blood stream infections). Majority of children were cannulated in first prick 49(46.7), followed by insertion requiring two pricks in 41(39%) children. Only 10 patients needed third attempt for cannulation. More than 3 attempts were needed in 5 children. Insertions were done by PICU consultant in 22 cases

Abstract PP-013 Table 1 Characteristics of survivors vs non survivors

	survivor		non survivor		P value
	mean	SD	mean	SD	
age	5.11	4.81	6.96	5.55	0.144
Picu stay	9.79	6.32	4.90	2.41	0.001
central line days	7.24	4.71	4.00	2.14	0.003
number of pricks	1.76	1.04	1.86	0.79	0.703
time of insertion	11.06	4.62	11.86	3.57	0.475
ventilation duration	5.02	3.35	4.00	2.03	0.209
duration of inotropes	4.31	2.75	3.43	1.96	0.190