Prevalence of critical congenital heart defects (CCHD) is 1.5–10.1136/archdischild-2014-307384.320

Results

Bayley Scale of Infant Development - II was used. Frail and motor retardation is frequently encountered retardation. In terms of the mental development index, 34.4% of the patients were with moderate or mild retardation. For group A, according to the psychomotor developmental index 48.6% of the patients were found mild to severe retarded. In terms of the mental development index, 34.4% of the patients were with moderate or mild retardation. For group A, according to the psychomotor developmental index 48.6% of the patients were found mild to severe retarded. In terms of the mental development index, 34.4% of the patients were with moderate or mild retardation.

Conclusions

Mental-motor retardation is frequently encountered in children with cyanotic congenital heart disease. For this reason, these children have to be under regular follow up for neurodevelopmental status.

<table>
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<th>Abstract PS-025</th>
<th>Statistical comparison of screening modalities</th>
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<td>Sensitivity (%)</td>
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<td>PE</td>
<td>50</td>
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<tr>
<td>POX</td>
<td>90</td>
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Background and aim

Neonates with left ventricular outflow tract obstruction (LVOTO) are at risk of developing brain damage, due to either ischemia or hypoxemia. Our aim was to explore the differences in cerebral and renal tissue oxygen saturation (rSO2) and extraction (FTOE) between neonates with LVOTO with or without compromised antegrade ascending aortic flow.

Methods

We included fourteen neonates with LVOTO and categorised them into neonates with compromised antegrade ascending aortic flow (hypoplastic left heart syndrome (n = 6)) and neonates without compromised antegrade ascending aortic flow (coarctatio aorta (n = 7)/non-critical aortic valve stenosis (n = 1)). We measured cerebral and renal rSO2 using near-infrared spectroscopy during 72 h. Simultaneously, we measured predural arterial oxygen saturation (SpO2) and calculated FTOE.

Results

On day 1, neonates with compromised antegrade ascending aortic flow had lower cerebral rSO2 than neonates without compromised antegrade ascending aortic flow (median rSO2: 68.5% vs. 79.4%, p-value = 0.032). Furthermore, cerebral FTOE tended to be higher in neonates with compromised antegrade ascending aortic flow (coarctatio aorta (n = 7)/non-critical aortic valve stenosis (n = 1)). We measured cerebral and renal rSO2 using near-infrared spectroscopy during 72 h. Simultaneously, we measured predural arterial oxygen saturation (SpO2) and calculated FTOE.

Conclusions

Because there were no differences in SpO2 between both groups, and cerebral FTOE tended to be higher in neonates with compromised antegrade ascending aortic flow, the lower cerebral oxygen saturation might be due to ischemia rather than hypoxemia. Furthermore, in neonates with antegrade ascending aortic flow, cerebral oxygenation might be spared.

PS-026 CEREBRAL AND RENAL OXYGEN SATURATION AND EXTRACTION IN NEONATES WITH LEFT VENTRICULAR OUTFLOW TRACT OBSTRUCTION

1W Mebus, 2ME van der Laan, 3MTR Roothoff, 2RMF Berger, 1AF Bois, 1EMW Kooi. 1Department of Neonatology, Beatrix Children’s Hospital/University Medical Center Groningen, Gronigen, Netherlands; 2Department of Pediatric Cardiology, Beatrix Children’s Hospital/University Medical Center Groningen, Groningen, Netherlands

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