are needed in a greater population of neonates. (granted MZiNSW nr NN407414336)

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THE STUDY OF CIRCULATING ENDOTHELIAL PROGENITOR CELLS AND RELATED INFLAMMATORY FACTORS IN CHILDREN WITH CORONARY ANEURYSMS LATE AFTER KAWASAKI DISEASE

Z.-D. Du, C. Duan, S.-G. Wan

Beijing Children's Hospital, Capital Medical University, Beijing, China

Objectives: Concerns have been raised regarding the existence of endothelial damage and the possibility of a predisposition to premature atherosclerosis in young adulthood with a history of Kawasaki disease (KD). This study was designed to evaluate the Circulating endothelial progenitor cells (EPC) and the serum lipoprotein levels and high sensitivity C-reactive protein in children with coronary aneurysms.

Methods: Thirty-one children with coronary aneurysms due to KD and 21 healthy controla were enrolled. Circulating EPC were determined by flow cytometry, and defined as CD34/ KDR/$CD133^{+}$ cells. Serum hs-CRP levels were determined by euzymelinked immunosorbent assay.

Results: The KD group included 9 children with medium aneurysms and 22 children with gaint aneurysms. The duration from the onset of the disease was 1-12.5 years (median 2.53 years). One children had angina pectris, another had heart failure and abnormal Q waves. The hs-CRP levels in KD group was significantly higher than in normal controls (2.77±1.06 mg/L VS 1.60±1.53mg/L, $P< 0.01$). The number of circulating EPCs between the two groups had no statistical significance ($P>0.05$). The serum levels of TG, TC, HDL-C, LDL-C apo-A1 and apo-B between the two groups had no statistical significance ($P>0.05$).

Conclusions: The serum level of hs-CRP were significantly increased in KD group, while circulating EPC and serum lipoprotein levels have no significant differences between the two groups. This suggest that children with persistant coronary aneurysms due to Kawasaki disease may have the disposition to premature atherosclerosis in young adulthood.

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OUTCOMES OF PREMATURE NEONATES REFERRED FOR PDA LIGATION TO A NATIONAL TERTIARY CENTRE

O. Neylon[1], C. Magner[1], E. Molloy[2], B. O'Hare[1]

[1]PICU, Our Ladys Childrens Hospital, Crumlin, [2]National Maternity Hospital, Holles St, Dublin, Ireland

Background: It is well recognised that presence of a haemodynamically significant PDA increases the risks of bronchopulmonary dysplasia(BPD), intraventricular haemorrhage(IVH) and necrotising enterocolitis(NEC) to the premature neonate. It has previously been recommended that significant PDAs be ligated within three weeks of age [Vida et al, 2009].

Methods: All patients referred for PDA ligation in 2008/2009 were identified from a computerised database system. Primary outcome of mortality was examined as well as secondary outcomes of NEC, IVH, BPD and PVL.

Results: 41 referrals were identified over the two year period, of which 31 babies had PDA ligation surgery. 3 patients died pre-operatively (2-NEC;1- sepsis) and 7 did not require ligation after assessment. Surgery was carried out at an average of day of life 38, with only 2 babies having their procedure completed at less than three weeks of age. No patients had surgery on an elective list, with 61.3% of surgeries performed at weekends. Logistic regression analysis did not show any relationship between day of life of surgery and secondary outcomes [p-values: NEC = 0.095; BPD = 0.157; PVL = 0.222; IVH = 0.74]. Overall incidences were as follows : NEC = 30%; BPD = 74%; PVL = 12%; IVH = 34%.

Conclusions: Premature neonates requiring PDA ligation surgery in Ireland are being marginalised to emergency lists and weekend surgery times. There is no evidence to show that this increases their morbidity or mortality, but a further adequately powered audit is recommended.