c) Multiple Regression Analysis showed Positive and significant correlation of age, weight, height with each SBP and DBP (P value < 0.001)

d) Mean SBP and DBP in obesity & overweight group were significantly higher than those in normal weight group (P < 0.0001).

e) Children with positive Family history of Hypertension has significantly higher mean SBP & DBP than in children with normotensive parents (P value < 0.001)

f) Higher the grades of Socio economic status, higher are the mean SBP & DBP. (P < 0.001).

Conclusions: Regular Blood pressure measurement of children is mandatory for early detection of Pre hypertension & Hypertension. High Body mass index & Positive Family history of Hypertension forms an important indicator of childhood hypertension and appropriate therapeutic life style changes should be initiated to prevent Hypertension & its complications.

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INOTROPE CHANGEOVER IN PAEDIATRIC INTENSIVE CARE

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Background and aims: Variations in inotrope changeover technique can contribute to deviations in blood pressure, heart rate, internal bleeding and in extremis, death (Sheppard, 2001; Crisp, 2002; Morrice et al, 2004; Trim and Roe, 2004). Clinical audit was performed to establish inotrope changeover practices in paediatric intensive care (PIC) and highlight inconsistencies amongst the local nursing population.

Methods: Nursing staff (n=80) completed a one sided, questionairre comprising of 5 criteria.

Results: Frequency of inotrope changeover: Nursing staff (n=45) reported implementing inotrope changeover at least once a week. Others perform inotrope changeover every shift (n=25) or even once a fortnight (n=9). Few staff never implement inotrope changeover (n=1).

Side affects observed by staff: Nurses reported witnessing hypertension (n=55) and hypotension (n=49) during inotrope changeover. Tachycardia (n=23) and bradycardia (n=8) were also reported. One respondent reported observing cardiac arrest.

Inotrope changeover practices of staff: Inotrope changeover technique is dependent upon patient stability. The double pumping technique (n=47) was performed frequently. Definitions of double pumping were not examined. Quick change (n=23) and purging (n=32) technique are also used.

Content of nursing documentation: Common themes for nursing documation include current inotrope dose (n=60), adverse events encountered during changeover (n=56), indications for inotrope infusion (n=23), changeover method used (n=16 and reasons for inotrope changeover technique used (n=4).

Conclusions: Inotrope changeover comprises variables not examined here such as job role, experience and patient dependency. Clinical audit has raised awareness of this important issue and the need for more in depth examination of practice.

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THE STUDY OF LATE ARTERIAL LESION IN CHILDREN WITH CORONARY ANEURYSM DUE TO KAWASAKI DISEASE

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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 endothelial function and carotid intima-media thickness in children with coronary aneurysms.

Methods: Thirty-one children with coronary aneurysms (9 with medium and 22 with giant aneurysms) due to KD and 21 healthy controls were enrolled. The duration from the onset of disease was 1-12.5 years (median 2.53 years) in KD group. Brachial artery flow-mediated dilation, non- flow-mediated dilation, carotid artery stiffness index and intima-media thickness were determined by highfrequency ultrasound.

Results: One KD patient had angina pectris, another had heart failure and abnormal Q waves. Endothelial dependent flow-mediated dilation (FMD) and Non

flow-mediated dilation was lower in patients with coronary aneurysms due to KD as compared with normal controls (P< 0.05). Arterial stiffness index was raised in KD group than in normal controls (P< 0.05). There was no difference between the two groups in carotid intima-media thickness. The FMD was lower in KD patients with myocardial ischemia or ECG abnormalities than in patients without (P< 0.05), while no difference was found in FMD between patients with giant aneurysms and those with medium aneurysms.

Conclusions: The endothelial function in patients with coronary aneurysms due to Kawasaki disease is damaged, especially in patients with giant coronary aneurysm and myocardial ischemia.

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ECHOCARDIOGRAPHY AND ITS ROLE IN THE DIAGNOSIS AND PROGNOSIS OF CONGENITAL HEART DISEASE IN CHILDREN

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The most important thing in the congenital heart disease evaluation is early diagnosis, because almost all CHD, even the most complicated ones, are now operable.

Objective: To determine the frequency and pattern of CHD in our country and to underline the role of early diagnosis in the outcome of patients with CHD.

Material and methods: Retrospective study of children with CHD, examined at hospitalized at University Children´s Clinic, Prishtina, from 2000 - 2006. Age from 1 mo to 18 years. Ecxept 2D color echocardiography, other non invasive techniques were also used for diagnosis: history, laboratory, ECG, chest X ray, pulse oximetry.

Results: The number of children with CHD was 1671, including the simpliest to most complex CHD. According to cyanosis, there were 207 (12.4%) cyanotic patients, while 1464 (87.6%) have no cyanosis. The type of lesions were similar to those reported from other studies. The age when the diagnosis of CHD is performed was: Only 45% of children with CHD were diagnosed under the age of three years, the remaining 55% were diagnosed later, even at the age above ten years. It was probably the reason for a high number of complications in children with CHD, such as : pulmonary hypertension (3.5%) , heart failure (10%) and death (5.5%).

Conclusion: Since echocardiography is sufficient for diagnosis of most CHD and has no adverse effects or hazards, echocardiography could be a routine in order to prevent late diagnosis of CHD and to escape complications.

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ROLE OF MAGNESIUM IN PREVENTING POSTOPERATIVE ARRYTHMIAS IN NEONATES AND INFANTS UNDERGOING THE ARTERIAL SWITCH OPERATION

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Objective:

1. Magnesium levels in neonates and infants with Transposition of Great Arteries undergoing the Arterial Switch Operation.

2. Role of Magnesium supplementation in prevention of post operative arrythmias in these infants.

Material and methods: After ethical clearance and written informed consent from the parents, Neonates and infants undergoing the Arterial Switch operation were randomly assigned to one of two groups. Group 1 (n=25) was given intravenous Magnesium Sulphate 30 mg /kg in 5 ml Normal saline,immediately after cessation of cardiopulmonary bypass, while Group II (n = 25) was given 5 ml of Normal saline as a placebo .Blood samples were taken after induction of anaesthesia, after stabilisation on cardiopulmonary bypass, during rewarming , and 4 hours after admission to the intensive care unit.The samples were analysed for arterial blood gases,and electrolytes including Na+,K+,ionised Ca++,ionised Mg++ .Continuous ECG rhythm analysisand documentation of arrythmias was performed for 24 hours in the intensive care.

Results: Both the groups were comparable with regard to demographic data.Mean preoperative ionised Mg++ levels were below normal in both the groups, at 0.30 (±0.11)mmol/L in group I and 0.30(±0.8)mmol/L in group II. Serum ionised Mg++increased during rewarming period of cardiopulmonary bypass,in both groups.