stress (serious quarrel with classmates, physical activities) have been observed. The patients had no coronary risk factors. Their average blood pressure was 150/90 mmHg and heart rate was 120 beats/min. ST-segment elevations and T-wave inversions were registered on electrocardiograms of teenagers. Dysfunction and dyskinesia of the left ventricle apex and interventricular septum was detected on echocardiography. The levels of creatine kinase-MB and troponin I did not increase. Occlusions and anomalies of vessels were not demonstrated by aortocoronarography. Tako-Tsubo cardiomyopathy was diagnosed in all cases. Symptomatic medical treatment had been administered and the function of heart was normalized within 3-4 weeks.

Conclusions: Tako-Tsubo cardiomyopathy may occur not only in adults, but in teenagers too. Therefore increased awareness of Tako-Tsubo cardiomyopathy will lead to its more frequent diagnosing, which will result in adequate medical management.

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OUTCOME OF MURMURS BEYOND INFANCY

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Aim: Aim is to find out outcome of children above 1 referred with murmurs.

Methods: This is a retrospective audit of patients above 1 referred between April 2007 and October 2009 to consultant paediatrician with expertise in cardiology at a paediatric cardiac clinic in a district general hospital.

Results: 190 of 700+ seen in cardiac clinic were children above 1 year of age referred for murmur± associated problems. 55 were from General Practitioners (29%) and 135 from Paediatric colleagues (71%). Murmur resolved in 16% (31/190) proportionally from each group. Of remaining 159 children with persistent murmur, clinical examination and echocardiography confirmed innocent murmur in 140 (88%) and they were discharged. 19 children (12% of each group) were diagnosed to have congenital heart disease. Cardiac diagnoses were Ventricular Septal Defect (8), AtrioVentricular Septal Defect (1), Patent Ductus Arteriosus (2), Atrial Septal Defect (3), Aortic Stenosis (3) and Branch Pulmonary Stenosis (2). 6 of these (31%) with

significant lesions were referred to tertiary cardiac centre for further assessment/intervention.

Conclusion: Childhood murmurs are sometimes transient and vast majority of persistent murmurs are innocent. Asymptomatic murmurs after infancy could be reviewed by paediatricians and persistent or symptomatic ones referred to paediatric cardiac clinic. Facility to perform an echocardiography at district general hospital will help in confirming innocent murmurs and more importantly reassuring anxious parents. It also has a role in detecting few, yet significant, congenital heart conditions that could then be referred on to tertiary centre.

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SIGNIFICANCE OF MURMURS IN INFANCY

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Aim: To find out the significance of murmurs heard during infancy.

Methods: Retrospective audit of all infants with newly heard murmurs referred from April 2007 to October 2009 to cardiac clinics in district general hospital run by a Paediatrician with special expertise in cardiology.

Results: Over 30 month period, 246 infants were newly referred for murmurs. No murmurs were heard in clinic in 36% (88/246). Of 158 persistent murmurs, 54 were discharged following normal echocardiogram. Abnormalities excluding Patent Foramen Ovale (PFO) on echocardiogram were found in 91 (58%). These were Ventricular Septal Defect (VSD) 34 (37%), Pulmonary Branch Stenosis 24 (26%), Patent ductus arteriosus (PDA) 7, Atrial Septal Defect 7, PFO & PDA 6, Aortic Stenosis 5, VSD & PDA 1 and Tetralogy of Fallot 2, Pulmonary Stenosis 1, Transposition of great arteries (TGA) 1, Congenitally Corrected TGA 1, Double Outlet Right ventricle 1, Complete Atrio-Ventricular Septal defect 1. 24 of the 91 infants (26%) were referred to the nearest tertiary cardiac centre for further management. Abnormalities in ECG were seen in 20/24 infants. 80 infants with less significant cardiac defects did not require any intervention and were followed up locally.

Conclusion: More than half of infants with murmur have a cardiac defect and one-fourth of these defects are significant ones. Asymptomatic infants with persistent murmurs and/or abnormal ECGs should be referred for definitive diagnosis to cardiac clinics. District general hospital clinics with echocardiographic facility provide a good screening place and in reducing the work load of tertiary cardiac centres.

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BP MEASUREMENT IN CHILDREN - IS IT A ROUTINE PRACTICE?

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Background and aims: Blood pressure measurements are not done routinely. Guidelines recommend BP measurements in all children over 3 years and in high risk patients irrespective of their age when attending the hospital. This simple bedside tool may reveal a significant underlying clinical problem even in an asymptomatic child.

Methods: Case notes of 100 children with 52 from speciality wards, 23 from general paediatric ward and 25 from Child assessment unit were carefully checked for documented BP and other vital parameters. As per the guidelines, children aged over 3 years from general paediatric ward and assessment unit, as well as all patients in cardiac, renal and oncology wards (speciality wards) irrespective of age were included.

Results: There were 75 inpatients, 53 males and 19 under 3 years. Heart rate, temperature and oxygen saturation were documented in all 100 children. Respiratory rate was noted in 97 and BP in 72 children.

BP was documented in all the children from speciality wards but only in 52 % from general paediatric ward and 32 % from assessment unit.

Conclusions: Documentation of BP in our audit was higher than a recent similar study from Nottingham, but it falls below the recommended standards. BP measurement was routine in speciality wards unlike in general paediatric ward or child assessment unit. BP recording may be slightly more difficult compared to other parameters but it can go a long way in early diagnosis of hypertension which helps to implement therapeutic and preventive measures.

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HYPERGLYCEMIA AND POSTOPERATIVE COMPLICATIONS IN PEDIATRIC CARDIAC PATIENTS

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Background: Pediatric critical illness hyperglycemia is associated with poor outcome. Tight glycemic control is still in discussion.

Aim: To study the association between hyperglycemia and complications for postoperative pediatric cardiac patients.

Patients and methods: Concurrent cohort study. We included patients admitted to the intensive care unit after congenital heart defects surgery from december 2008 to december 2009. Patients with preoperative diagnosis of diabetes or infection were excluded. Blood glucose levels were measured in all children during 72 hours. Hyperglycemia was defined as blood glucose ≥ 126 mg/dl. We defined 2 groups according to first glucose measurement: normo and hyperglycemic group. We calculated relative risk of postoperative complications in relation to hyperglycemia adjusting for age and complex congenital heart disease.

Results: A total of 88 patients entered the study; 55% were in the hyperglycemic group. Glucose levels were normalized at 72 hours for all patients without insulin. The postoperative complications rate was 50%; there were no significant differences between groups. Relative risk of postoperative complications associated with PICU admission hyperglycemia was 1,32 (95% CI: 0, 85-2,05). Relative risk adjusted for age and complex congenital heart disease was 1,01 (95% CI: 0,65-1,58).

Conclusion: Hyperglycemia is transient in postoperative pediatric cardiac patients, and is not associated with higher complications.