the post-operative course, and the different ways of management of these cases.

Results: We have 1135 cases operated during the study period, 57 cases (5%) were complicated with chylothorax in the post-operative period, 30 patients (54%) were males, while 27 cases (47%) were females, the age ranged from 4 to 2759 days. The most common surgeries complicated with chylothorax were the single ventricle repair surgeries (Glenn–Fontan) 15 cases (27%), followed by the arch repair cases 10 cases (18%), the ventricular septal defect cases 10 cases (18%), the Atriointercep-toral septal defect cases 7 cases (12%), the arterial switch cases 6 cases (11%), and others 8 cases (14%).

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SHA 079. Importance of combining clinical judgment, ECG and echocardiography to recognize ALCAPA in patients with dilated cardiomyopathy
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Objectives: Anomalous left coronary artery originating from pulmonary artery (ALCAPA) is a rare and serious congenital anomaly. Most patients present at age of 1–2 months. Late referral due to wrong diagnosis of dilated cardiomyopathy (DCM) has catastrophic outcome.

Methods: Between October 09 and October 10, 18 patients (median age 13 months) were referred with diagnosis of DCM. Patients underwent detailed history, physical examination, investigations including Echocardiography. Left sided obstructions were excluded. LV function was evaluated and coronary arteries were carefully assessed.

Results: Two patients were suspected as ALCAPA by clinical evaluation and ECG.
First case: 5 months old boy referred with diagnosis of DCM. The patient had manifestations of heart failure, ECG showed Q waves in lead aVL. Echo showed decreased LV systolic function, dilated right coronary artery, and left coronary artery arising from pulmonary artery with diastolic flow to pulmonary artery which confirmed the diagnosis of ALCAPA. Second case: 6 months old boy was referred to us because of respiratory distress, ECG showed Q waves in aVL. Echo showed severely decreased LV systolic function. Coronaries were not clearly seen, so diagnostic cardiac cath performed confirming ALCAPA.

Conclusion: ALCAPA is surgically treatable disease that can present same as DCM. Clinical features and ECG may suggest the diagnosis which can be confirmed by echocardiography. The cardiac catherization should be performed if echocardiography is inconclusive. ALCAPA should be ruled out in all infants referred with diagnosis of DCM.

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SHA 080. The role of cardiac sonography in a pediatric community setting: Bergamo experience during the last 12 years
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Introduction: The history and physical examination often lack the necessary sensitivity and specificity to accurately diagnose cardiac structural and functional abnormalities without further testing. Echocardiography is a more refined and exact diagnostic modality.

Methods: We performed 2D Color-Doppler Echocardiography scan (GE VIVID) on our pediatric population older than one month of age in a community care setting ambulatory over five years period. Analysis of echocardiograms and patient medical records were extracted.

Results: A retrospective analysis of 480 patients referred for echocardiography evaluation over five years period. Of these, (n=120) studies were performed to assess chest pain, palpitations and syncope. The majority (no 360) of the studies were ordered for the evaluation of heart murmur. We observed that echocardiography was an effective real-time monitoring tool in early detection of post-operative residual heart defects, pericardial effusion, pulmonary and systemic hypertension, as well as in the follow-up of valve regurgitation, in patients with rheumatic heart fever, nonetheless, it is fundamental in early detection of haemodynamic abnormalities in children after cancer treatment.

Conclusion: The practice of pediatric care medicine has matured dramatically throughout the past decades, in view of recent technological developments, adequately trained primary care physicians should be encouraged to perform echocardiography in a community care setting, as this modality might be an indispensable tool in the current health care management.

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SHA 081. Medical therapy of pulmonary arterial hypertension: Where and who started treatment?
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Objective: Treatment of pulmonary arterial hypertension (PAH) by Sildenafil and Endothelin-I antagonist (Bosentan)improve the outcome of these patients. Our aim is to investigate who started treatment and on what basis.

Methods: Between January 2008 and October 2010, 48 patients with suspected PAH were referred to our institute. All underwent ECG, Echocardiography (Echo) and in some patients cardiac catheterization (Cath). Retrospectively patient files were reviewed in regards to age, gender, associated disease or congenital heart disease (CHD), Echo and cath results, treatment type, who started the treatment and where.

Results: Out of 48 patients, 10 patients (21%) were on treatment prior to referral to our institute. Thirty-eight patients were investigated, 6 (12%) underwent cardiac cath. Eighteen patients (36%) started treatment; 14 by pediatric cardiologist, 3 by pediatric pulmonologist, and one by general pediatrician. Sixteen patients are on Sildenafil and two on Sildenafil and Bosantan. Median age was 20 months (3 months–13 years). Male to female ration 1:1.6. Thirteen patients have Down syndrome and 12 of them have associated CHD disease, two patients have pulmonary vein stenosis who treated Sildenafil treatment by inexperienced pediatrician before surgical correction, another patient has large VSD and pulmonary artery band was declared inoperable but cath at 4 years of age revealed reactive pulmonary vascular bed to Nitric Oxide provocation, two patients have other syndromes.

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Conclusion: The standard principles for management of PAH for the current group was not followed. It should be started by specialized physicians, after investigation and at specialized tertiary centre.

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SHA 082. Feasibility and efficacy of real-time 3-D TEE for guiding device closure of interatrial communications: Initial experience

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Aims: Our aim was to assess the feasibility and safety of real-time three-dimensional transoesophageal echocardiography (RT 3D TEE) for guiding transcatheter closure of interatrial communications and to evaluate its additional benefit over conventional (2D TEE).

Methods and results: Data collected retrospectively between January 2007 and October 2010 at KACC, Riyadh, KSA. 66 patients had device closure of their interatrial defect; 21 patients had the procedure guided by fluoroscopy, 2D TEE, and RT 3D TEE. 11 female and 10 male. Mean age 26.71 (±15.5). The children should be 20 kg and above. The application of RT 3D TEE allowed safe device deployment in 19 patients without any complications, 1 patient with deficient aortic and inferior rim which clearly explored by RT 3D TEE and given atrial of closure but failed, the other patient showed ASD by 2D TEE and by RT 3D TEE showed a PFO with aneurysmal flap and the procedure had quiet.

Conclusion: RT 3D TEE as an adjunct to 2D TEE is a feasible and safe tool to guide transcatheter device closure of interatrial communications. These data indicate that RT 3D TEE can be used to safely monitor interatrial defect closure in clinical routine.

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SHA 083. The use of transannular patch in TOF: 10 years single centre experience and outcome

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Background: Trans-annular patch (TAP) repair of Tetralogy of Fallot (TOF) is correlated to poor late outcome, 30% need reoperation due to pulmonary regurgitation (PR). Severe stenosis at pulmonary annulus and at the right ventricle outflow requires TAP. We aim to assess the impact of TAP of TOF during the last 10 years.

Methods: 170 patients, between 1999 and 2009, 140(82%) “simple TOF” and 30 had associated anomalies; 11 (AVSD); 9 (DORV); 7 absent pulmonary Valve (APV); 3 (PA). This cohort was divided to TAP and None TAP. The analyzed variables. Age, Gender, weight, associated surgery to TAP PA Z value; pump time (TPT), cross clamp (Cx).

Complications and time in ICU, hospital stay, morbidity and mortality.

Results: 122 patients had TAP; 114 “simple TOF”, 6 (DORV), 1 (AVSD), 1 (APV) and 1 (PA). Age (5 d–8 y), CX (118-38), TPT (110–64 mts), ICU (1–14) one patient (45 d). Hosp stay (7 d–55). The amount of inotropic support after surgery was not TAP related, morbidity is minimal and mortality is 0%.

Conclusion: The Z score value of –2 for the PV anuulus was the basic criteria for the TAP repair, associated to right band muscle resection from the RVOT. The majority of our patients were over 6 months age. The postoperative was uneventful regardless type of patch used and long CPB time for some cases. TAP in our practice is considered to be safe.

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SHA 084. CABG and ROSS in 9 years old

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Abstract: Video presentation

Objectives: Coronary artery bypass grafting associated with Ross Procedure performed to 9 years old boy. Dr. Imad Naja; Dr. Nani Najm. Department of Cardiac Sciences, King Abdul-Aziz cardiac Centre, Riyadh, Saudi Arabia. This uncommon presentation of this disease at this age, leads u to share our experience. How to do it is the video presentation of CABG + ROSS performed to a 9 years old boy.

Methods: 9 years old boy presented at emergency department with severe chest pain, subsequent Echocardiography showed thickened aortic valve with moderate stenosis. The angiogram showed moderate aortic valve stenosis and severely disease ascending aorta.

Result: The surgery was uneventful; it was remarkable the atheromatoses at the level of the ascending aorta, successful outcome, the patient was discharged at the 7th post-operative day.

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SHA 085. Heart defects in acyanotic pediatric patients referred with heart murmurs

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Objectives: The aim of the study is to explore the prevalence of congenital heart disease in pediatric patients referred to our center solely based on the detection of a heart murmur on routine physical examination.

Study design: A retrospective database review was performed for all patients referred to KACC from July 2007 to March 2009 for cardiovascular evaluation because of a heart murmur detected during routine physical examination. This study included all pediatric patients from the neonatal period to 12 years of age who underwent echocardiography in our center. Patients with cyanosis, those with a significant difference in blood pressure between the upper and lower limbs, preterm neonates, patients with acquired heart disease, and syndromic or critically ill patients were excluded from this study.

Results: Of the patients in the database, 245 met the inclusion criteria. The median age was 7 months (1 day to 12 years old), and the median weight was 7.85 kg (1.9–54 kg). A normal