For many years Intra Vascular Ultrasound (IVUS) remained a tool of interest to those who primarily engaged in research. IVUS since then became a resource for true luminal and vessel wall Histo-pathological definitions that provided invaluable details. However since the era of good old balloon angioplasty the role of IVUS remained limited to certain applications that included among others angiographic borderline lesions, limited dissections, ambiguous angiographic findings, calcifications and to a lesser extent thrombi.

The era of Drug Eluting Stenting (DES) brought additional challenges to modern Per-cutaneous Coronary Interventions (PCI) including issues of Stent sizes and deployment pressures, issues of Stent mal-apposition acute or acquired and Geographic miss. Many of these concerns remained under estimated until we were shocked with the scare of stent thrombosis early late or very late by 2006. The role of IVUS hence became much more contributing and set additional standards of Stent deployment techniques; Of particular importance, the various niche applications like Left Main, Bifurcational, Ostial Stenting and increasing off-label applications of long overlapping stents.

IVUS as well enhanced our ability to define causes of stent failures including stent fractures, other stent deformities and mal-appositions. More recently IVUS introduced forward imaging catheters that are likely to enhance the safety and success of Chronic Total Occlusion Interventions.

In addition to grey scale IVUS the introduction of Histo-Pathological simulations using Virtual Histology (VH) and more recently i-map technology is increasingly becoming a niche application for detecting vulnerable plaque providing better definition of Thin Cap Fibro Atheroma (TICFA) that emerged as potential cause of Acute Coronary Syndromes (ACS) and Stent failure when associated with geographic miss. With more outcome trials and emerging additional therapies VH-IVUS is likely to provide An emerging strategy of potential remedial approaches for Vulnerable plaque including lesion pacification whether by intensive medical therapy or possibly Stenting.

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SHA 042. ECG an important diagnostic test in cases of Duchene muscular dystrophy
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Objective: Duchene muscular dystrophy (DMD) usually leads to dilated cardiomyopathy (DCM), congestive cardiac failure, arrhythmias, and sudden cardiac death. There are very few cases reported of Wolf Parkinson White Syndrome (WPW) associated with DMD. We present this rare case and to highlight the importance of ECG in cases of DMD.

Methods: 6 Years old boy k/c of DMD (Diagnosed by clinical features, CPK, LDH, DNA analysis) was referred to us for cardiac monitoring.

Results: ECG showed features of WPW syndrome in the form of short PR interval < 0.01 s (NV 0.09–0.16), positive delta wave in leads I, II, AVL, V4-6 and negative delta waves in leads AVR & V1, prolonged QRS duration > 0.125 s (NV 0.03–0.08). Twenty hour Holter was normal. Echo was unremarkable except for mild LV dilation with LVEDd 4.5 cm (NV 2.7–4 cm, z-score 3), LVEDDs 3.2 cm (NV 1.6–2.6 cm, z-score 4), and normal LV function FS 34% and EF 67%.

Conclusion: DMD is a progressive muscular dystrophy which leads to DCM which is one of cause of mortality in these patients. ECG should be the part of routine cardiac evaluation of all patients with DMD to detect its rare association of WPW syndrome.

SHA 043. Aneurysmal dilatation of the main pulmonary artery and pseudoaneurysm of the right pulmonary artery after arterial switch operation for TGA
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A case of congenital heart disease in the form dextroposition of great arteries, ventricular septal defect, patent ductusarteriosus and peripheral pulmonary stenosis (d-TGA, VSD, PDA and PPS). The case underwent arterial switch operation, VSD closure, PDA division and RPA augmentation. During postoperative follow up, it was found to have progressive MPA dilatation and both right and left pulmonary artery stenosis for which RPA stenting was done. During post catheterization follow up the case was found to have increased gradient across RPA and LPA and the RPA stent was found to be broken. The patient underwent restenting of RPA and stenting of LPA. Few months later the case was presented with severe respiratory distress, chest X-ray, Echocardiography and CT scan revealed huge aneurysm of the MPA and pseudoaneurysm of the RPA with the stent floating in it.
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SHA 044. Presentation of the first 100 patients with fetal echocardiography evaluation
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Background: Introduction of fetal echocardiography into prenatal care has improved antenatal detection of congenital heart disease (CHD) which remains the most frequently overlooked lesions during prenatal ultrasound evaluation.

Objectives: At our institution we introduced fetal echocardiography clinic since March, 2009. This is a prospective study with analyzing data of the studied mothers showing the effect of this introduced service on the care of these patients.

Methodology: Between March 2009 and October 2010, a total of 100 mothers with high risk pregnancy referred from obstetrics department were examined at pediatric cardiology department. They can be divided according to cause of referral for fetal echocardiography into 3 groups; (1) Suggested abnormal fetal heart by initial scanning (by obstetricians), (2) Mothers with previous children with CHD, and (3) Mothers with systemic diseases associated with higher incidence of fetal CHD. The studies were repeated for some mothers, according to need.

Results: 100 mothers were evaluated. Indication for referral was: abnormal obstetric sonogram (n = 52), past history of CHD (n = 26), and maternal disease (n = 22). The gestational age at referral was 18–25 weeks in 51 mothers, 26–30 weeks in