Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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On the other hand, initial attempt to cross the lesion antegradely with Fielder XT-A coronary wire was failed only to succeed with Miracle wire which may suggest hydrophilic wire rather than hydrophobic wires may overcome difficulties when hydrophilic wires fail albeit with more experience. This can obviate the need for open surgical repair which is associated with more operative and post operative complications.

The covered stents may minimize such complications since they stabilize the aortic wall and can be re-dilated in the event of restenosis2. The common long-term complications of transcatheter interventions are better success to cross the lesion, which may suggest hydrophobic wire rather than hydrophilic wire. Fielder XT-A coronary wire was failed only to succeed with Miracle wire. On the other hand, initial attempt to cross the lesion antegradely with hydrophilic wires while hydrophobic wires may overcome difficulties when hydrophilic wires fail albeit with more experience. This can obviate the need for open surgical repair which is associated with more operative and post operative complications.

Conclusion: The successful stenting of severe aortic coarctation with total or near total descending aortic occlusions can be achieved with dual arterial access3 which was thought to be invariable surgical candidates in near past, using coronary wires while hydrophobic wires may overcome difficulties when hydrophilic wires fail albeit with more experience. This can obviate the need for open surgical repair which is associated with more operative and post operative complications.

Abstract — 85

TWO CASE REPORTS OF PERCUTANEOUS DEVICE CLOSURE OF PARAVALVULAR LEAK

Dr. Bency Baby, Dr. S.V. Praceen, Dr. Govindan Vijayaraghavan.

Percutaneous closure of mitral or aortic prosthetic PVL4 emerged as an alternative to surgery in high risk patients. 53 year old gentleman who underwent surgical aortic valve replacement 9 years back for calcific Bicuspid aortic valve presented with worsening dyspnea on exertion NYHA class 3, on examination jvp elevated, bilateral pedal edema, vitals were stable, pan systolic murmur at apex and tricuspid area, early diastolic murmur in aortic area, chest bilateral crepitation and pedal edema, vitals were stable, pan systolic murmur at apex and tricuspid area, early diastolic murmur in aortic area, chest bilateral crepitation present. ECG showed LBBB. TTE3 showed dilated LV, global LV hypokinesia, moderate LV systolic dysfunction, grade 2 diastolic function, mild to moderate MR5, moderate TR, severe PAH5. TEE3 showed para valvular leak at LCC7 area with extension to NCC8, mild to moderate MR, mild TR, LV dysfunction, thickened bioprothetic leaflets with increased gradients. Blood investigation revealed anemia. CT aortogram confirmed our diagnosis. As the patient was not willing for a redo surgery, we proceeded with PVL repair. 12 X 5 mm Amplatzer valvular plug III under GA deployed in PVL region. PVL reduced under fluoro and TEE examination. Post procedure no peri-cardial collection. No valvular leak and heart failure symptoms also reduced.

The second case was 40 yr old gentleman with history of Bicuspid Aortic valve diagnosed at his 4 years of age underwent surgical aortic bioprosthetic valve replacement 2 years back because of severe symptomatic aortic stenosis. 4 months later redo surgical aortic valve replacement done due to Prosthetic valve endocarditis. Now he presented with worsening dyspnea on exertion - NYHA class II. Patient was hemodynamically stable with grade 4 early diastolic murmur in left 3 rd ICS. TTE showed severe paravalvular leak. Baseline investigation were normal. CTVS consultation done to assess feasibility of surgical intervention. They advised as not a suitable candidate in view of redo state. So we proceeded with CT aortogram to assess the paravalvular leak. Transcatheter paravalvular leak repair done under GA, under fluoro and TEE guidance. After the procedure PVL reduced under fluoro and TEE examination. Post procedure no pericardial collection. No valvular leak.

Conclusion: Percutaneous closure of PVL is an effective procedure that improves the symptoms and reduce the severity of complication of PVL.

Abstract — 86

ATTAINMENT OF TARGET LOW-DENSITY LIPOPROTEIN CHOLESTEROL LEVELS AMONG PATIENTS WITH ACUTE CORONARY SYNDROME SIX WEEKS AFTER UNDERGOING PERCUTANEOUS CORONARY INTERVENTION

Dr. Kunal Mahajan, Dr. Aditya Batra, Dr. Anshul Gupta.

Background: Patients with the acute coronary syndrome (ACS) undergoing percutaneous coronary intervention (PCI) are at high risk of recurrent cardiovascular (CV) events. The Lipid Association of India (LAI) guidelines recommend the early initiation of intensive lipid-lowering therapy among patients with ACS to achieve low-density lipoprotein cholesterol (LDL-C) levels of less than 50 mg/dL. Early aggressive reduction of LDL-C is paramount in stabilizing coronary plaques and reducing post ACS CV events.

Methods: We retrospectively analyzed the data of all patients with ACS who had undergone PCI in our institute between 1st March 2020 to 20th May 2022. A total of 100 patients were identified in whom lipid profiles at the time of index admission and 4-6 weeks of follow-up were available.

Results: The mean age of the study population was 55.34 + 11.26 years. Only 4% of patients were above 75 years of age. 98% of patients were receiving high-intensity statin therapy daily. Rosuvastatin 40 mg and 20 mg were used by 64% and 3% of patients, respectively, while 8%, 23%, and 40 mg were used by 64% and 3% of patients, respectively, while 8%, 23%, and 8%, 23%, and 20 mg, respectively, while 8%, 23%, and 20 mg, respectively, while 8%, 23%, and 20 mg were used by 64% and 3% of patients, respectively, while 8%, 23%, and 20 mg, respectively, while 8%, 23%, and 20 mg were used by 64% and 3% of patients, respectively, while 8%, 23%, and 20 mg, respectively, while 8%, 23%, and 20 mg were used by 64% and 3% of patients, respectively, while 8%, 23%, and 20 mg, respectively, while 8%, 23%, and 20 mg were used by 64% and 3% of patients. Only 3% of patients were receiving ezetimibe 10 mg/day. The mean LDL-C at admission was 123.90 ± 41.73 mg/dL, while at 4-6 weeks follow-up, it reduced to 66.41 ± 29.36 mg/dL. A reduction of at least 50% in the LDL-C was noted in only 45% of patients, while only 31% achieved levels <50 mg/dL.

Conclusion: Most ACS patients undergoing PCI have LDL-C levels well above the recommended range at 4-6 weeks despite high-intensity statin therapy. The addition of non-statin drugs at the time of admission in ACS patients is likely to reduce LDL-C to target levels in a significantly higher proportion of patients when compared with high-intensity statins alone. However, future large randomized trials are needed to assess this approach’s safety and clinical efficacy.

Abstract — 87

RARE CASE OF UNTIMELY ST ELEVATED MYOCARDIAL INFARCTION IN YOUNG PERSON POST COVID 19 VACCINATION - COINCIDENCE OR SIDE EFFECT OF COVID VACCINE.

Dr. Shashikant Singh, Dr. Tutan Das, Dr. Anindya Banerjee.

Introduction: The Coronavirus disease 2019 (COVID-19) vaccine was granted emergency authorization use on December 18, 2020, based on strong phase three study data.Covid vaccine reported a 1% serious adverse event rate in both the vaccinated group and the control group. These serious adverse events were defined as death, a life-threatening adverse event, in patient hospitalization. They also reported no difference in thrombotic events between groups. This case report presents a potential
serious adverse reaction and explores whether we can attribute a serious adverse reaction to the COVID-19 vaccine.

**Case description**: A 29yr/M farmer by occupation presented to our emergency department with complain chest pain and epigastric discomfort and dyspnoea on exertion which started approximately 12 hr after 1st dose of covid vaccine BBV152(covaxin). Patient presented to our emergency 8 hr after onset of symptoms. Chest pain radiated to his left shoulder and associated with palpitation and sweating. He denied loss of consciousness, headache, nausea or vomiting. No previous history of coronary artery disease or allergic reaction to any substances. He had never smoked and denied alcohol consumption. There was also no family history of coronary artery disease or any sudden cardiac death. ECG was done which ST elevation from V2 to V6 with T wave inversion from V2 TO V5 (Fig 25). Bedside echoc showed an anterior and apical wall motion abnormality with LVEF-43.7% through global longitudinal strain(GLS) (Fig 26). hs-cTnT was 250 ng/L. So it was treated as a case of STEMI with dual antplatelet and heparin. Routine investigations (complete hemogram, liver function test, renal function test, lipid profile, thyroid function test, fasting and post-prandial blood sugar, glycated haemoglobin, coagulation profile, urine examination, serum electrolytes, chest X-ray, ultrasonography whole abdomen) were within normal limit Coronary angiography showed a critical stenosis of proximal and mid segment of LAD (Fig 27(a)). Percutaneous coronary intervention was done to LAD with DES was placed with TIMI III flow(Fig 27(b)) was achieved post stenting. There was no recurrent chest pain or arrythmia. Patient was discharged after 3 days.
Discussion: As at this point there is no experiment done to specifically investigate the incidence of MI among COVID-19 vaccine recipients, some hypotheses can be put forward. First, vaccine induced prothrombotic immune thrombocytopenia, an entity similar to heparin induced thrombocytopenia. Second demand-supply mismatch in a frail heart post-vaccination. Another case was reported in India of a STEMI two days post AZD1222 vaccine in a healthy 63-year-old man. Third, transfection of platelets by mRNA or viral vector-based vaccine may be remote possibility. Fourth it can be vasospastic allergic myocardial infarction in response to vaccine, termed as Kunis syndrome.

Conclusion: We report a case of an MI after the first dose of the Covaxin COVID-19 vaccine. Any research on the topic should be written carefully and avoid overstating the findings. Additionally, as a precautionary measure, providers should consider additional screenings for older adults prior to COVID-19 vaccine.

Abstract — 88

INTERESTING CASE OF PRESYNCOPE IN ELDERLY FEMALE
Dr. Archit Dahiya, Dr. Rajeev Sharma, Dr. Harsh Wardhan.

Introduction: Presyncope denotes near fainting or a prodrome of syncope. It is usually accompanied by a feeling of light headedness, general weakness, warmth, diaphoresis, nausea, palpitations or dizzy feeling. Most common etiologies are noncardiac etiologies that include vasovagal or neurocardiogenic, and causes related to volume shifts such as orthostatic hypotension, medication-induced, vascular and sepsis. Cardiac causes, which are more ominous, include mechanical (e.g., cardiac tamponade or valvular disease) and dysrhythmic (e.g., paroxysmal ventricular tachycardia or conduction system disease).

We report a case of 56-year-old female who presented with presyncope and found to have RBBB on ECG which later diagnosed as alternating bundle branch block. Alternating bundle-branch block is believed to warn of impending complete heart block and to be associated with a poor prognosis if not treated by the implantation of a pacemaker.

Case report: A 56-year-old female without any comorbidities presented with history of repeated episodes of presyncope for 3 months. Her ECG showed RBBB pattern with regular heart rate of 76 bpm. She under 24-hour holter monitoring, which showed no abnormality other than RBBB. 2D echocardiography was normal. She was sent home with reassurances. After one week, she presented again with episodes of presyncope. Her ECG showed LBBB with regular heart rate of 72 bpm. In view of alternating bundle branch block, she was advised for pacemaker implantation. During her hospital stay, another ECG performed showed 2:1 AV block. She underwent coronary angiography and showed no significant coronary artery disease. She underwent permanent dual chamber pacemaker implantation. No evidence of amyloidosis or sarcoidosis was found. She was discharged the next day and was doing well on subsequent follow ups.

Discussion: Alternating bundle branch block is defined as having LBBB and RBBB on the same ECG strip or these 2 patterns may be recorded in separate ECG which are few hours or days apart.\(^{1,2}\) ABBB results from the difference in refractory period of both bundle branches.\(^1\) Ogura Y et al have reported a case of 66-year-old female with ABBB in combination with intra-hisian block.\(^3\)

Nowadays it is suggested that RBBB and LBBB often reflect delays in the bundle branches rather than actual, absolute conduction block.\(^4,6\) So block/delay in one bundle mask the disease in the contralateral bundle branch. The pattern of alternating BBB should be treated as equivalent to high-grade atrioventricular block or complete heart block.\(^7\)

Conclusion: This case highlights the need to assess each patient with mild symptoms with high suspicion even if 24-hour holter monitoring is normal. In such cases, extended loop recorders can be utilized to make prompt diagnosis.

Abstract — 89

DOES CARDIAC INJURY INDICATE SEVERITY OF COVID-19 INFECTION?
Dr. Prarthi Shah, Dr. Pooja Vyas, Dr. Kunal Parwani.

Background: Cardiac injury associated with severe COVID 19 patients may lead to adverse clinical outcomes. Present study was designed to evaluate clinical significance and association of cardiac injury in patients with COVID19.

Methods: We retrospectively enrolled 1000 COVID 19 patients who were hospitalized and fulfilled study criteria at our institute from May-2020 to Nov-2020. Cardiac injury was defined by elevated high sensitivity Troponin I (TnI). We grouped patients according to cardiac injury into two groups; Tnl <26 ng/l and Tnl ≥ 26 ng/l. Cardiac biomarkers, inflammatory markers and in hospital mortality data were collected and analyzed for both groups. For predictors of mortality regression was analyzed.

Results: Patients with Troponin I >26 ng/l were more likely to have higher age (P=0.00), hypertension (8.91% vs. 13.94% P=0.003), diabetes (6.12% vs. 10.33% P=0.004), prior cardiovascular diseases (1.5% vs. 4.11%, P=0.001), CKD (2.56% vs. 6.90%, P=0.01), average hospital stay (6.53 vs. 10.61 days, P=<0.0001), length of ICU stay (5.10 vs. 9.43 days), severe CT severity score (12.33 vs.29.10, P=0.0001), mortality (7.09% vs. 26.37%) in comparison to patients with Tnl <26 ng/l. On regression analysis, odds of Troponin I (OR=1.01, (CI-1.001-1.02, -0.01), CKP MB (OR=1.004(CI-1.001-1.007, -0.01), CT severity score (OR=1.15, (CI-1.12-1.18, -0.0001) and higher hospital stay (OR=1.04, (CI-1.02-1.05, -<0.0001) were found to be predictors of in hospital mortality.

Conclusion: Patients with cardiac injury during hospitalization had higher radiological severity of COVID 19 infection and in hospital death.

Abstract — 90

PREDICTION OF COMPLICATION RATE IN INFANTS OF DIABETIC MOTHERS USING CORD BLOOD HAEMATOOCRIT
Dr. C. Arshad Ali, Dr. N. Neha Nizar, Dr. K. Meenakshi, Dr. R. Rameshwar, Dr. Sunil Kumar Menon, Dr. M. Vengatesh.

Diabetes in pregnancy, both gestational and pre-existing can affect both the maternal and foetal metabolism. The neonate of a diabetic mother may have greater risks for derangements of growth, metabolic abnormalities, congenital malformations and foetal wastage during pregnancy and at birth. It is mandatory to keep stringent glycaemic control in pregnant women with diabetes with diet, oral hypoglycaemic agents or insulin to avoid occurrence of adverse perinatal outcomes to the mother and foetus. Cord blood haematocrit (HCT), being an indicator of the magnitude of erythropoesis, has become increasingly important in assessing foetal hypoxia due to foetal hyperglycaemia, hyperinsulinism and hyperketonaemia. By increasing blood viscosity, polycythemia can impair microcirculatory flow in end organs and can present with neurologic, cardiopulmonary, gastrointestinal, and metabolic symptoms. Moreover, GDM altered neonatal plasma lipids metabolism and so newborns of diabetic mothers may be predisposed early in life to LDL hypercholesterolemia and thus may be at a greater risk of developing coronary heart disease later in life.

This study was conducted to predict and assess the complications in infants of diabetic mothers (IDM), using a simple tool like HCT.

One hundred and thirty neonates were studied. Babies were followed up from birth with cord blood HCT, birth weight, hypoglycaemia, hypocalcaemia, neonatal hyperbilirubinemia, screening echo and other morbidities.

79% of IDM’s had birth weight of <4000 grams. 85% of the mother had gestational diabetes and the rest had overt diabetes.