Case Summary. Established therapies against atherosclerosis exclusively focus on risk factor modification i.e control of hypertension, hyperglycemia, dyslipidemia and thereby reducing only 40% of CVD events, leaving 60% of CVD events to occur. Therefore new approaches should be undertaken to tackle CHD which kills millions of people each year worldwide. The atherosclerotic plaque related events reflecting the temporal changes i.e initiation, progression and complication of lesions may serve as surrogate biomarkers for hard clinical endpoints in interventional studies. Further search for new biomarkers with high predictive value is needed to identify high risk patients and thus allowing early intervention.

TCTAP C-139
Complex Long LAD Lesion Involving the Ostium: How Would I Treat?
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[CLINICAL INFORMATION]
Patient initials or identifier number. FM
Relevant clinical history and physical exam. A 50 year old man presented with – History of effort angina for last 6 months (CCS class II) - Risk factor was diabetes, hypertension, dyslipidemia and smoking. Relevant examination revealed no abnormality
Relevant test results prior to catheterization. EKG: No significant abnormalities Echo: No regional or global LV wall motion abnormalities Concentric LV hypertrophy EF: 62% Treadmill test is positive for provicable myocardial ischaemia
Relevant catheterization findings. LM relatively free of disease (Fig 1, 2)- LAD: Long 85% narrowing in proximal and mid (Fig 1, 2) 75% narrowing in LAD ostium and proximal segment - LCX: Big size vessel and free of disease (Fig 1, 2)- RCA: Normal (Fig 3)

[INTERVENTIONAL MANAGEMENT]
Procedural step. PCI to LAD – LM: Considering the complexity of the coronary lesion we switched over to femoral route. 600 mg clopidogrel 6 hours before and heparin IA bolus j before the procedure to maintain ACT around 300 seconds. LM is relatively disease free, angle of the bifurcation with the LCx – angles <75°, it would be great difficulty in precise stent placement in LAD ostium and risk of plaque shift, we decided to deploy the stenting from LAD with overlapping with distal stent across the LCX back in LM, 7F sheath, JL 3.5, 7F guiding catheter engaged in to LM, 0.014 runthrough wire introduce in to distal LAD across the lesion and another wire inserted in to LCX. Lesion predilated by 2x20 mm balloon at 14 ATM. After predilatation patient developed severe chest pain, hypotension with ST elevation. CAG showed no flow phenomena.(Fig.2). IC GP IIb IIIa receptor blocker boluses infused. 3.5 x 48 mm DES (Xience Xpedition) deployed across the lesion at 14 ATM (Fig 2). Another 4 x 22 mm DES (Resolute Integrity) from LM to LAD overlapping. Post dilatation by 3.5x12 mm NC balloon at 22-24 ATM distal Stent and 4.5x12 mm NC proximal and LM at 18-22ATM with excellent result with TIMI III flow. (Figure 3). Hospital Course and Follow up: Hospital course was uneventful, No major bleeding, Patient was discharged with aspirin 150 mg OD and prasugrel 20 mg OD. At one month follow up patient is totally symptom free.
Case Summary. Radial approach may be switched to femoral approach should in such kind of complex case. In long and tortuous lesion after predilatation coronary dissection may be occurred with no flow phenomena. Prompt recognition and implantation of stent across lesion with full coverage of dissection part may solve such kind of devastating situation. Close monitoring is necessary.

TCTAP C-140
Acute Coronary Syndrome Caused by Spontaneous Coronary Artery Dissection in a 32-Year-Old Pregnant Woman
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[CLINICAL INFORMATION]
Patient initials or identifier number. A.T.

Relevant clinical history and physical exam. Spontaneous coronary artery dissection (SCAD) is likely to occur in young women and acute coronary syndrome (ACS) due to SCAD has a possible risk of catastrophic event in a pregnant condition. We experienced a case of 32-year-old pregnant woman with ACS, which led to cardiac arrest in the emergency department (ED). The patient was presented by ambulance due to sudden chest oppression. She had been healthy expect for the history of a miscarriage at 31-year-old and was in the thirty-eighth week of pregnancy without any problem of prenatal checkup.

Relevant test results prior to catheterization. Her vital signs were relatively stable: blood pressure 159/102mmHg, regular pulse rate 75 beats/min, and oxgen saturation 100% on room air. She was diagnosed as the anterior ST-elevated myocardial infarction because of ST elevation in leads V2-6 in electrocardiography (ECG) and positive results in H-FABP and Troponin T checks. After chest X-ray investigation, her consciousness level was dropped due to ventricular fibrillation (VF) and cardio-pulmonary resuscitation (CPR) was started immediately.

[INTERVENTIONAL MANAGEMENT]
Procedural step. Primary percutaneous coronary intervention (PCI) was performed under the support of an intra-aortic balloon pump (IABP). Although we carefully crossed the lesion with SION blue guide wire, it was sucked in the false lumen. We crossed an Athlete JOKER guide wire into true lumen successfully using a multi-functional probing catheter (Crusade). Intravascular ultrasound (IVUS) showed intimal-media flap and intramural hematoma without any atherosclerotic change, which were representative findings of the SCAD. Enlarged hematoma compressed the true lumen with ongoing ischemia. For the dilation of true lumen, we used a semi-compliant balloon (Tazuna 2.5X15) firstly, which failed to prevent the vessel collapse. Secondly, we used a cutting balloon (Flextome 3.0X10mm) to make the re-entry exit of the pseudo lumen, which enabled to