were less likely to receive thrombolytic therapy, beta-blockers or undergo angiography and had higher mortality.

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**Prognostic significance of high sensitivity C-reactive protein in patients with angina pectoris underwent percutaneous coronary intervention**

**Tayeb Bafadhel, Yehia Kishk, Amr Yousef**

**Background:** C-reactive protein is an easily measurable acute phase reactant synthesized by hepatocytes in response to pro-inflammatory cytokines. Elevated CRP has been identified as a strong predictor of prognosis in healthy individuals, in patients with stable angina, in unstable angina and in patients after acute myocardial infarction. The prognostic significance of high sensitivity CRP level in percutaneous coronary intervention is unclear.

**Methods:** We prospectively studied 41 patients with chronic stable angina (28 patients) and unstable angina (13 patients) who underwent elective coronary stenting. All patients had normal troponin level before the procedure. Blood samples for hs_CRP were obtained before the procedure, 24 h after the procedure. Patients followed up at 1 month and after 2 years.

**Results:** Mean hs_CRP before the procedure in all patients underwent PCI was 2.38 ± 2.21 µg/ml. The mean hs_CRP 24 h post procedure was 7.43 ± 10.6 µg/ml. There was significant difference between pre procedural hs_CRP and post procedural (P = 0.007) At follow up period (1 month), No major adverse cardiac events (MACE) have occurred. However, 24 patients complain of chest pain. There was no significant correlation between either pre-procedural, or 24 h post procedure hs-CRP and chest pain (r = 0.13, 0.2, respectively). At follow up period (2 years), 7 cases missed; MACE has occurred in 13 patients.

**Conclusion:** Mechanical disruption of atherosclerotic plaque during elective coronary stent implantation causes a systemic inflammatory response. Measuring of hs-CRP either pre-procedural or post procedural in low risk patients is not useful for predicting of either early or late cardiovascular events.

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**Bentall procedure for adult patient with supravalvular aortic stenosis and coronary aneurysms**

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We report a complex case of a 35-year-old gentleman who presented with large anterior myocardial infarction. Coronary angiography showed multiple coronary aneurysms of all proximal major coronaries with a total occlusion of the LAD artery. A diffuse form of supravalvular aortic stenosis was discovered incidentally upon aortic root injection and was confirmed with CT aortogram.

Echocardiography revealed akinsia of the anterior wall with preserved thickness and depressed left ventricular function (EF = 25%). Aortic valve was competent with normal leaflet structure. The patient underwent Bentall procedure with LIMA to LAD coronary bypass grafting with the use of cardiopulmonary bypass utilizing the right axillary artery for arterial cannulation and routine right atrial venous cannulation. The post-operative course was uneventful. The patient was discharged home after 7 days and came back for follow up after 6 months in good condition.

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**Total occlusion, basic equipments for lesion interrogation, evaluation, visualization and endoluminal reopening study**

Waleed Y. Kadro, Maya Turkmani, Hussam Rahim, Owais Altisheh

**Background:** Chronic total occlusion (CTO) is a challenging dilemma for the interventional cardiologist. The success rate ranges between 30% and 80% depending on the tools used and the patience of the interventional cardiologist who should always be ready for the unexpected. We report our results for CTO intervention using simple and economic tools.

**Method:** Our group did 472 consecutive cases of CTO intervention over the past seven years using the simple approach. The tools consist of one guiding catheter, one stiff hydrophilic glide wire, one balloon and one stent in most cases unless the lesion is too long requiring more than one stent. Contra lateral injection to assess the collaterals was not allowed in this basic equipments protocol for CTO intervention. 57% of the cases were turned down for PCI by other cardiologists (group1). CTsurgeons turned down 37% of the patients for CABG (group2). 20.42% of the cases failed attempted PCI by another cardiologists (group3).

**Results:** Overall angiographic success with TIMI II–III flow and no significant residual stenosis was achieved in 91% of the cases. There were no death or emergency CABG during hospital stay or one month after PCI. Protocol violation (usage of more than one wire or more than one balloon) was done in 10 cases. Perforation occurred in 5 (1.12%) cases, two of them required pericardial window. In hospital MI occurred in 6 cases (1.24%). There was no need for GP IIb/IIIa inhibitors in any case. Success rate were 87%, 91%, 100% in groups 1, 2, 3, respectively. One month follow up results were: 0% mortality,
0% CAGB, 0% reintervention, 2% rehospitalization for CHF, 1.4% rehospitalization for ACS.

**Conclusion:** CTO requires endless patience from the cardiologist. There is no need to abuse the resources of the cath lab if we follow the protocol of TO BELIEVERS. Excellent results can be obtained if CTO intervention done by using these basic equipments.

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**Statin and ezetimibe in silent ambulatory myocardial ischemia (sesami trial)**

Waled Y. Kadro, Maya Turkmani, Hussam Rahim, Owais Alitisheh, Ali Debs

**Background:** Cholesterol lowering is associated with a reduction in cardiovascular morbidity and mortality. Statins are the main drugs for cholesterol lowering. Ezetimibe when added to statins gives further reduction in cholesterol but its long-term effect on cardiovascular morbidity and mortality and ischemic events is not known. This study sought to determine whether further cholesterol lowering with ezetimibe will also result in a reduction of myocardial ischemia during daily life.

**Methods:** We enrolled 50 patients with proven stable coronary artery disease (CAD) and at least one episode of ST-segment depression on ambulatory ECG monitoring. All of them were receiving optimal therapy for CAD including statin therapy for cholesterol reduction. 25 patients were randomized to continue their statin therapy (Statin only group) and 25 to receive statin plus ezetimibe 10 mg/day (ezetimibe group). Serum cholesterol and LDL cholesterol levels and ambulatory monitoring were repeated after 4-6 months of therapy. The two groups were comparable with respect to baseline characteristics, number of episodes of ST-segment depression, and baseline serum cholesterol levels. Holters were read by a blinded cardiologist.

**Results:** The ezetimibe group had lower mean total and LDL cholesterol levels at study end and experienced a significant reduction in the number of episodes of ST-segment depression compared with the statin only group. ST-segment depression was completely resolved in 13 of 25 patients (52%) in the ezetimibe group versus 3 of 25 (12%) in the statin only group. The ezetimibe group exhibited a highly significant reduction in ambulatory ischemia ($P < .001$). By logistic regression, treatment with ezetimibe was an independent predictor of ischemia resolution.

**Conclusions:** Further cholesterol lowering with ezetimibe can result in reduction or resolution of myocardial ischemia recorded as episodes of ST-segment depression in ambulatory monitoring of the ECG.

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**Troponin level before coronary artery bypass graft surgery is associated with increased mortality rate**

Walid Abukhudair, Massimo Porqueddu, Nazir Ahmed, Ahmed Hafed, Abdullah Ashmeg, Thamer Bin Yousef

**Objective:** Cardiac troponin level indicate extend of myocardial injury.

Coronary artery bypass graft surgery early post myocardial infarction is associated with high mortality, trying to find a quantitative parameter to determine the high risk patients.

**Method:** Prospective data collection of troponin level and outcome of coronary artery bypass graft surgery was collected over 3 years (30 days mortality).

**Result:** A total of 550 patients who had CAGB over 3 years was collected, the patients were divided into 3 groups. Group 1 patient with troponin less than 3. Group 2 patient with troponin between 3 and 5. Group 3 patient with troponin above 5. The 30 days mortality was proportionally correlated to the troponin level. Group 1 had a mean mortality of less than 2%, group 2 had a mean mortality of 3.5%, and group 3 had a mean mortality rate of 10%.

**Conclusion:** Preoperative 30 days mortality post CAGB is proportionally related to the extend of myocardial damage which is reflected by trop in level. When possible it is better to wait and delay surgery until troponin level below 3.

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**Proper method for preoperative chest preparation of patients listed for cardiac surgery**

Walid Abdulkarim Abukhudair

**Context:** Postoperative pulmonary complication (PCCs) after cardiac surgery are a major source of morbidity and mortality, and increase length of hospital stay and resource utilization. The preoperative including prehospitalization period before CARDIAC surgery maybe used to improve a patients pulmonary condition. The efficacy of preoperative non-invasive CPAP and BIPAP machine use, chest physiotherapy (CPT) and postural drainage, frequent nebulization plus inspiratory muscle training (IMT) in reducing the incidence of PCCs in high-risk patients undergoing CARDIAC surgery has not yet been determined.

**Objective:** To evaluate the prophylactic efficacy of our new preoperative chest preparation strategy (strategy A) on the incidence of PCCs in high risk patients scheduled for elective CARDIAC surgery compared with classic routinely used one (Strategy B).

**Design, setting, and patients:** A single blind, randomized clinical trial conducted at the Cardiac Center of Kind Fahad Armed forces Hospital, Jeddah,