

**Aims:** There is no data about the utilization of a single transradial guiding catheter for the current routine, transradial, right and left coronary diagnosis and intervention. We investigated the feasibility and safety of using 6 Fr Ikari left (3.5) guiding catheter for this purpose.

**Methods and results:** This prospective single-center study enrolled 621 consecutive patients referred for transradial coronary diagnosis with ad hoc coronary intervention. The radial artery was successfully accessed in 96.8% of patients. Right and left coronary arteries were successfully engaged in 98.1% of cases. Engagement with good back-up at the right and left coronaries (device success) was achieved in 96.6% of cases. Coronary intervention was performed in 61.2% of cases, among them, 84.5% had coronary stenting. Procedure success was 98.2%. Procedure time was  $21.4 \pm 15.1$  and  $55.4 \pm 36.1$  min; mean fluoroscopy time was  $6.8 \pm 7.2$  and  $24.1 \pm 18.9$  min and the mean contrast volume was  $96.2 \pm 45.3$  and  $197.9 \pm 46.2$  ml for diagnostic and interventional cases respectively. One patient (0.16%) had catheter related radial artery spasm and 3 patients (0.48%) encountered a catheter induced RCA dissection.

**Conclusion:** Right and left coronary angiography and intervention are feasible and highly successful using IK 3.5 as a single transradial guiding catheter.

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### Level and value of interleukin-18 in patients with acute myocardial infarction undergoing primary coronary angioplasty

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**Background:** The prognostic value of interleukin (IL)-18 in patients with ST-segment elevation acute myocardial infarction (STEMI) is currently unclear. Thus, the purpose of this study was to test whether the circulating IL-18 level can predict prognosis in patients with STEMI undergoing primary percutaneous coronary intervention (PCI).

**Methods and results:** A prospective cohort study was conducted with 267 consecutive patients with STEMI of onset <12 h who were undergoing primary PCI. Blood samples for plasma IL-18 level were collected in the catheterization laboratory following vascular puncture. The plasma IL-18 level was also evaluated in 25 healthy and 30 at-risk control subjects. The plasma level of IL-18 was significantly higher in acute myocardial infarction (AMI) patients than in both groups of control subjects (all  $P < 0.0001$ ). Patients with high plasma IL-18 level ( $\geq 560$  pg/ml) had significantly higher peak creatine kinase-MB levels, higher incidence of cardiogenic shock upon presentation, significantly lower left ventricular ejection fraction (LVEF), lower successful reperfusion and significantly higher incidence of 30-day composite major adverse clinical events (MACE) (advanced congestive heart failure  $\geq$  class 3 or 30-day mortality) than those

patients with low plasma IL-18 level ( $< 560$  pg/ml) (all  $P < 0.0001$ ). Multiple stepwise logistic regression analysis demonstrated that high plasma IL-18 level ( $\geq 560$  pg/ml) along with low LVEF ( $< 50\%$ ) and cardiogenic shock were the most independent predictors of 30-day MACE ( $P < 0.0001$ ).

**Conclusions:** In patients with STEMI, plasma IL-18 level is a major independent inflammatory predictor of 30-day MACE. Evaluation of circulating IL-18 might improve the prediction of unfavorable clinical outcomes following AMI.

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### Effectiveness of nurse-led telephone follow-up in cardiac patients with type 2 diabetes mellitus

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**Background:** Nurse-led telephone follow-up has proven to be a successful mode of care for patients with diabetes mellitus (DM). This model of care includes; intensive education about diet, exercise, and treatment and could be the next step in the evolution of our telemedicine system.

**Objectives:** To investigate the effect of a nurse telephone follow-up in cardiac patients with type 2 DM on glycemic parameters and adherence to recommendations attending a nurse-led clinic at King Abdulaziz Cardiac Center.

**Methods:** This prospective quality improvement project invited all cardiac patients from October to December, 2011, who were unable to attend the clinic frequently, to participate. Inclusion criteria included documented coronary artery disease, type 2 DM on insulin with a current HbA1c  $> 8\%$  for 6 months or more.

All patients in this program receive care from a Cardiac Diabetic Nurse (CDN) according to the American Diabetic Association guidelines. In addition to this standard care, enrolled patients received a telephone call weekly for 12 weeks which reinforced education regarding diet, exercise, medication adherence and addressed additional patient problems. Medication adherence was measured using the validated self-report Morisky Medication Adherence Scale Mandatory variables collected at baseline and at 12 weeks included; body mass index blood pressure, fasting and postprandial blood glucose, HbA1c and total cholesterol screen.

**Statistical analysis:** Analysis was performed using SPSS advanced statistics for windows, version 18.

**Results and conclusion:** Pending

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### Prevalence of white-coat syndrome in Saudi hypertensive patients

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