

up coronary angiography after 6 months revealed 10 patients suffered ISR out of 28 patients.

So as a result for all patients included in our study, 13 patients from group (I) suffered ISR in the period of 6 months follow up period, they represented 40% of the group, while 14 patients in group (II) with a percentage of 42.4% of the group suffered ISR at 6 months. There was no statistically significant difference between the two groups as regard the incidence of ISR at follow up. ($P > 0.05$).

Conclusions: We concluded that no significant statistical difference was found between the two stents (cobalt-chromium alloy bare metal stent versus conventional bare metal stainless steel stent) in diabetic patients regarding (initial procedural success, in-hospital complications, the incidence of ISR at follow up, event-free survival at follow up).

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Coronary bypass surgery in patients aged 70 years and over: Mortality, morbidity, & length of stay. Dar al-fouad experience

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The objective of this investigation was to compare the outcome of isolated coronary artery bypass grafting surgery in patients 70 years with those <70. The cardiac surgery ICU database of the Institute was used to obtain the characteristics of patients undergoing coronary artery bypass grafting between January 2001 and March 2013. The patients were divided into those 70 years of age and those <70 years old. Euroscore was determined for each patient for the analysis of mortality, and length of stay. During the study period, 7225 cases of coronary artery bypass grafting were carried out (isolated or with valve surgery), 501 (14.4%) cases were performed in the older group. The 30-day mortality for patients aged 70 and over was 17 (3.3%) out of 501 while that of patients <70 years of age was 188 (2.6%) out of 7225.

Apart from a higher incidence of wound infection in elderly patients, the frequency of other major complications was comparable in both groups. The average length of postoperative stay for the elderly patients was 15.4 ± 0.9 days compared to 13.7 ± 0.2 days for the younger group

This study supports the continued performance of coronary artery bypass grafting in patients 70 years. Advanced age alone should not deter a cardiac surgeon from offering such a potentially beneficial intervention.

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Diagnostic accuracy of prospective ECG gated coronary computed tomography on a 256 slices scanner: Daily practice experience

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Aims: To determine the accuracy of prospective ECG-gated computed tomography coronary angiography (CTCA) using 256-slice scanner for detecting significant coronary artery disease (CAD) and to quantitatively estimate lumen narrowing with CTCA in comparison to invasive coronary angiography (ICA).

Methods: This study included 109 consecutive patients who had ICA on the basis of a previous CTCA (within 60 days) for clinical suspicion of CAD. All CTCA scans were performed with a 256-slice scanner using prospective ECG-gated image acquisition. The presence of stenosis $\geq 50\%$, measured by QCA for ICA and Visual assessment for CTCA, was considered significant stenosis.

Results: Obstructive CAD was present in 73.4% of patients. On patient-based analysis, the sensitivity of CTCA was 98%, specificity 83%, PPV 94% and NPV 92%. For segment-based analysis, a total of 1584 segments were analyzed with a sensitivity of 89%, specificity 98%, PPV 85% and NPV 99%. High correlation was observed between degrees of luminal stenosis assessed by CTCA in comparison to QCA in all segments ($r^2 = 0.961$). There was high agreement between observers regarding the presence of significant luminal stenosis ($k = 0.78$) and good correlation for percentage of luminal stenosis ($r = 0.68$, $p < 0.001$) between both readers.

Conclusions: In a highly prevalence diseased population, prospective ECG-gated CTCA using 256-slice scanner is highly accurate for detection and quantification of the degree of coronary luminal stenosis in comparison to ICA.

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Diagnostic performance of Multislice Computed Tomography in evaluation of coronary artery bypass grafts in diabetic and non-diabetic patients

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Objectives: We sought to evaluate the diagnostic accuracy of noninvasive dual-source multi-slice computed tomography (MSCT) angiography in the assessment of graft patency and degree of stenosis in patients after coronary artery bypass grafting (CABG).

Background: Assessment of bypass grafts body and their anastomotic sites by invasive coronary angiography have a risk of potentially life-threatening complications and often require extra procedure time, contrast load, and radiation exposure.

Methods: 64-dual-source MSCT was performed to 51 (49 men, mean age 58.6 ± 8 years, range from 38 to 76) post-CABG symptomatic patients. Control of heart rate was done with oral beta blockers, sublingual nitrates was given 2-3 min before the scan. Mean interval between CABG surgery and MSCT was 73.41 ± 65.84 (range 3 to 252) months. Mean heart rate during scanning was 62.5 ± 13.2 (range 52–72) beats/min. Ninety-four percent of patients had both arterial and venous grafts. A total of 142 graft body and 142 anastomotic sites were analyzed. Two grafts body and 4 anastomotic sites were excluded because they were non-evaluable by MSCT. A semi-quantitative assessment of the graft stenosis severity was done according to the recommendation of the Society of Cardiovascular Computed Tomography (SCCT) A significant stenosis was defined as equal to or $> 70\%$, moderate stenosis 40–69% and mild $< 40\%$ lumen diameter reduction. A reference standard invasive coronary angiography was done according to conventional technique through standard trans-femoral

approach and was evaluated by an observer blinded to the MSCT results.

Results: The diagnostic accuracy of MSCT for the detection or exclusion of significant stenosis in grafts body and their anastomotic sites was 99.28%, sensitivity, specificity, positive and negative predictive values were 97.75%, 100%, 100%, 98.95%. The diagnostic accuracy for detection of degree of graft stenosis (mild, moderate, severe or occluded) was 97.18%.

Conclusion: Noninvasive MSCT angiography is an excellent tool for evaluating patency or degree of stenosis of bypass grafts body and their anastomotic sites in post-CABG patients.

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Differentiation between atrioventricular reentrant tachycardia (AVRT) and AV nodal reentrant tachycardia (AVNRT)

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Differentiation between atrioventricular reentrant tachycardia (AVRT) and AV nodal reentrant tachycardia (AVNRT) can be sometimes challenging in the EP lab. RV pacing during SVT produces progressive QRS fusion before QRS morphology becomes stable. This fusion zone (FZ) may differentiate AVRT from AVNRT independent of entrainment success. PPI-TCL during RV entrainment can help in differentiation; however it has some fallacies and limitations. We thought to compare the accuracy of atrial preexcitation (AP) & Stimulus to atrial (S-A) interval fixation in relation to fusion zone in identifying the mechanism of SVT.

We studied retrospectively and prospectively the effect of properly timed RVP on atrial timing during FZ. 118 SVT patients had RVP within 40 ms shorter than tachycardia cycle length (TCL). S-A interval and atrial CL were measured during FZ and with each QRS complex thereafter. A fixed S-A interval was defined as variation < 5 ms during RVP & AP is the first change in atrial CL \geq 10 ms.

9 patients were excluded due to cycle length oscillation > 10 ms before the onset of RVP and 6 patients had atrial tachycardia (VA dissociation with RVP) and were excluded. In the remaining 103 patients, PPI-TCL was significantly longer in AVNRT patients but postpacing response couldn't be assessed in 12 patients who showed consistent termination of tachycardia during RVP entrainments; 3 AVNRT patients (5%) & 9 AVRT patients (22%). And when assessed it was not diagnostic in additional 4 (6%) patients with AVNRT (< 115 ms) & 7

PPI-TCL in identifying the mechanism of SVT (100%, 92.4% and 84.8% consecutively).

We can conclude that during RVP within 40 ms of the tachycardia cycle length, fixed S-A interval and AP in relation to FZ were superior to PPI-TCL measurement in identifying the mechanism of SVT.

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Glycosylated hemoglobin (HbA1c) levels as follow-up for restenosis clinical outcomes after coronary artery stenting in patients with diabetes mellitus

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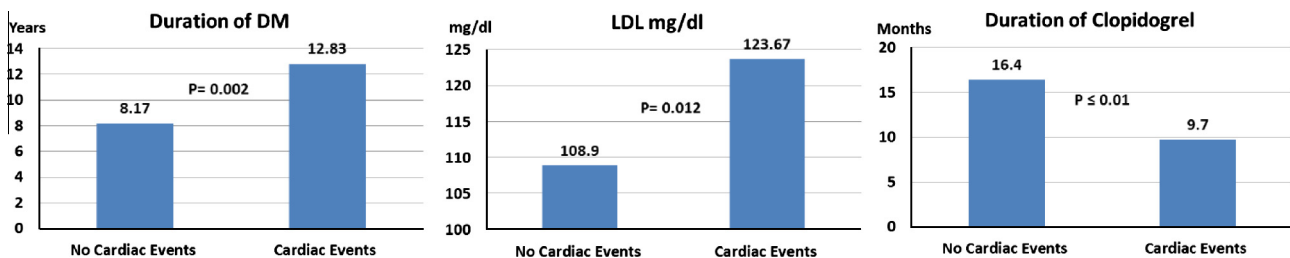
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Background: Diabetes has been shown to be independent predictor of restenosis after percutaneous coronary intervention (PCI). Diabetes mellitus has been proved to be a strong risk factor for in-stent restenosis. Restenosis after stent implantation remains the "Achilles'heel" of PCI, and patients with diabetes still have poorer clinical outcomes compared to non-diabetics.¹

Objective: (Aim of work) The aim of the present study is to evaluate whether the level of HbA1c as an indicator for the glycaemic control in diabetic patient is related to major cardiovascular events during the follow up in diabetic patients after percutaneous coronary intervention [(PCI) – stenting].

Methods: This study included 60 patients with diabetes 41 patient on oral hypoglycemic agent and 19 patient on insulin at the time of the study. These patients included 44 male (73.3%) and 16 female (26.7%) with mean age 56.48 ± 7.8 years. All patients were subjected to stress thallium at the end of follow-up period (24 month) or at the occurrence of the cardiac events. Follow-up HbA1c were performed before stenting and every 6 month till the end of follow-up period. In the study, 30 non-diabetic patients, who underwent stenting, were enrolled as control.

Results: Regarding the duration of diabetes mellitus (in years), patients who had cardiac events had longer duration of DM than who did not (12.83 ± 6.8 , 8.17 ± 3.3 yrs with p -value = 0.002). LDL level was lower in the patients who had no cardiac events than who did (108 ± 2.15 mg/dl, 123.67 ± 22.5 mg/dl with p -value = 0.01). While patients who had cardiac events were on shorter duration of clopidogrel than those who did not (9.7 ± 6.8 month, 16.4 ± 7.0 month with p -value \leq 0.01).



(17%) patients with ORT (≥ 115 ms). Atrial pre-excitation (AP) occurred during FZ in most AVRT patients and after FZ in most AVNRT patients. However, S-A fixation occurred during FZ in all AVRT patients and after FZ in all AVNRT patients. Fixation of S-A interval in relation to FZ was more accurate than either AP or

Regarding the HbA1c levels, HbA1c in the patients with cardiac events was $\geq 7\%$ while in the none cardiac event patients was $\leq 7\%$ with p -value < 0.01. Also, HbA1c during stenting was higher than HbA1c during follow-up in the whole diabetic group ($9.12 \pm 1.67\%$, $7.45 \pm 2.0\%$ with p -value < 0.01).