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## Heart

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### 4.30 Impact of Diabetes and Impaired Glucose Tolerance (IGT) on Complications and Hospitalisation in Patients with Acute Coronary Syndrome

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**Introduction:** Purpose of this study was to estimate the impact of diabetes and impaired glucose tolerance (IGT) on complications and hospitalisation in patients admitted for Acute Coronary Syndrome (ACS).

**Methods:** during 2005 have been treated 430 patients (141 male, 289 female) admitted to our operative department for Acute Coronary Syndrome; according to glycemia value this patients have been separate into three groups: normal glycaemia level (126 mg/dl to fast). All patients (mean age  $64 \pm 11$  years) have been examined to show the presence of cardiovascular risk factors (RF) and to measure glycaemia, total cholesterol (CT), HDL and LDL cholesterol (HDL-C, LDL-C), triglyceride (TG), fibrinogen and c-reactive-protein (CRP).

**Results:** The coronarography showed that patients affected by diabetes, compared with other groups, have a significant increased risk as compared to other groups. Coronary angiography has demonstrated a significant increased prevalence of coronary multi-vessel disease in diabetic patients as compared to other groups ( $p < 0.0001$ ): 53% of diabetics showed three vessel disease vs 22% of IGT patients and 10% of normoglycemic patients. The coronarography was followed by coronary angioplasty on 35% of patients with normal glycaemia level, on 57% of IGT patients and on 25% of diabetic patients ( $p = 0.003$ ). Diabetic patients were treated with revascularisation on 31% vs 23% of patients with normal glycaemia level and 14% of IGT patients. 38% of diabetic patients showed some complications during hospitalisation (MI, arrhythmias, APE, CHF) vs 32% of IGT patients and 26% of normal glycaemia level patients. The hospitalisation days were  $5 \pm 4$  for patients with normal glycaemia level,  $6 \pm 4$  for IGT patients,  $7 \pm 4$  for diabetics ( $p < 0.004$ ).

**Conclusions:** Diabetic patients showed a greater prevalence of RF like hypertension and dyslipidemia than other groups. High level of glycaemia is associated with greater number of complications during hospitalisation (e.g. Arrhythmia on 32% of diabetics, 21% of IGT patients, 14% of normal glycaemia level patients) and with extension of hospitalisation day.