SUMMARY

Metabolic syndrom is major risk factor for cardiovascular disease. Metabolic patients were defined by the presence of the following criteria.

I. Central Obesity ; defined as waist circumference equal to or more than 94 cm for men and 80 cm for female toghether with two of any of the following:

1. Raised triglyceride ; > 150 cm/dl or on specific treatment for this lipid abnormality
2. Low HDL-cholestrol ; < 40 mg/dl in male or < 50 mg /dl in female or on specific treatment for this lipid abnormlity
3. Raised blood pressure ; systolic blood pressure..>139mmhg or diastolic blood pressure >89mmhg or on specific treatment for hypertention.
4. Fasting blood glocuse ; >110 mg/dl or previousely diagnosed diabetes mellitus or impaired glucose tolerance.

Metabolic syndrom is defined as constellation of interrelated risk factors including hypertention, dyslipideamia (low HDL-C, elevated TG, obesity, insulin resistance and elevated blood glucose that increase cardiovascular disease and type II DM.

The most widely recognized metabolic risk factors are atherogenic dyslipidemia, elevated blood pressure, and elevated plasma glucose.

Individuals with these characteristics commonly manifest prothrombotic state and a pro-inflammatory state as well as atherogenic dyslipidemia.

The objective of the study was to assess the occurrence of in-stent restenosis in coronary bare metal stent **(**BMS**)** implantation in metabolic patients and to identify angiographic parameters as well as other risk factors related to restenosis in patients with metabolic criteria.

We studied 55 consecutive patients selected according to strict inclusion and exclusion criteria with eighty three lesions who were enrolled in this study after a successful procedure.

Procedure-related parameters such as type, number, diameter, length and final pressure of deployment of the stents were left to the decision of the operators. All patients received combined anti-platelet therapy in the form of Acetyl Salicylic acid **(**ASA**)** 150 mg oral dose daily and clopidogrel 300 mg(at least 24-48 hours priot to PCI) or 600 mg(at least 4 hours prior to PCI) as a loading dose followed by daily oral 75 mg maintenance dose for at least 1 month after the procedure, plus the anti-ischemic treatment prescribed by the physician according to the patient's condition e.g. ACEI , beta blockers, nitrates and statins**(**the two groups were matched for the medications received**)**. Glycoprotein IIb/IIIa inhibitors were not used in any patient.

After a successful PCI, the patients were monitored clinically and Laboratory during a 6-month follow-up period by visits within and at six months, and coronary angiography was done for all patients. The data

presented concern 55 patients (83 lesions) who completed the study was analyzed.

The study found that there were ingnificant differences regarding clinical and laboratory baseline characteristics between the two groups **(**metabolic and non-metabolic patients**)**. Lesions in the left anterior descending artery (LAD) and RCA (right cronanary artery) were more prevalent in non-metabolic patients with statistically non-significant difference. While lesions in LCX (left circumflex artery) was prevalent in metabolic patients with no statistically significant difference. Similar results were during angiographic follow-up

Advancing aging and elevated triglyceride as well as low HDL were indepedant risk factors for instent restenosis.

The rate of restenosis in the metabolic group among nine patients (26%) was higher than the non-metabolic group among six patients (16.6%), but this difference in restenosis was not statistically significant (P value =o.4).