

# SECONDARY PREVENTION AFTER ACUTE CORONARY SYNDROME IN PATIENTS WITH TYPE 2 DIABETES: RESULTS FROM A ROUTINE CLINICAL PRACTICE

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## INTRODUCTION

Secondary prevention of coronary artery disease (CAD) in patients with type 2 diabetes mellitus (T2DM) has shown benefit but the level of control is still disappointing. Most of the results are documented within clinical trials. There isn't enough information in routine clinical practice at short-term tracing. The main aim of this study is to collect information about the level of control of major risk factors in non-selected patients.

## METHODS/DESIGN

Observational and retrospective study. Patients with T2D who had suffered myocardial infarction between January and December 2012 were included.

Data provided by clinical history, with special regard to major cardiovascular risk factors were recorded. Optimal control of risk factors was defined by current clinical guidelines. Clinical events and achievement of targets at baseline, 6 months and 1-year after coronary event were recorded.

## RESULTS

Data from forty-eight T2DM patients (47.9% females, mean age: 70.6 ± 8.7 years, mean diabetes duration: 10.9 ± 9 years) were collected. 79.2% had hypertension and 66.7% had hyperlipidemia (table 1).

Patients with higher level of HbA1c were more likely to receive drug-eluting stent for coronary revascularization (table 2).

At baseline, proportion of patients who met target for non-smoking, SBP, LDL-C and HbA1c was 89.6%, 62.2%, 40% and 22.2% respectively.

The rates of patients with adequate control at 6 and 12 months after discharge are summarized in table 3.

Although follow-up HbA1c level was lower than at baseline, no significant difference was observed (7.9±1.3% vs 7.3±1.2% vs 7.3±2.1 %; p=0.06).

**Table 1: Epidemiological variables (n = 48)**

Gender Female / Male (%)	47.9 / 52.1
Age (years)	70.6 ± 8.7
T2DM duration (years)	10.9 ± 9
Hypertension (%)	79.2
Hyperlipidemia (%)	66.7
Current smokers (%)	10.4
Multivessel coronary disease (%)	57.5
ACS without ST-segment elevation (%)	70.8

**Table 2: Differences according to stent used for coronary revascularization**

Stent	Drug-eluting	Conventional	p
Age (years)	65.9 ± 8.6	73.6 ± 7.6	0.003
HbA1c (%)	8.5 ± 1.4	7.6 ± 1.2	0.04
Single-vessel coronary disease (%)	38.9	13.8	0.04
Optimal distal coronary bed (%)	50	10.3	0.003

**Table 3: Proportion of patients that reached cardiovascular risk factors on target and median serum level in follow-up period**

Cardiovascular risk factor on target	Baseline	6 months follow-up	12 months follow-up	p
Tobacco use cessation	89.6 %	93.9 %	97.1 %	0.01
Systolic blood pressure	62.2 %	74.4 %	71.4 %	0.004
LDLc	40 %	70 %	83.3 %	<0.001
HbA1c	22.2 %	41.4 %	35.5 %	NS
Serum level (median; SD)				
LDLc (mg/dl)	116.2 ± 41.6	42.1 ± 6.8	75.5 ± 26.2	0.013
HbA1c (%)	7.9 ± 1.3	7.3 ± 1.2	7.3 ± 2.1	NS

NS: not significant

## CONCLUSIONS

- Our outcomes from a routine clinical practice are relatively poor and don't differ much from the trials results.
- The rate of adequate control for each risk factor was similar at 6 months and at 1-year after coronary event. It reflects that there is an early improvement that is maintained after optimizing treatment.

