Routine care treatment of type 2 diabetes in Germany (DETECT study)

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Objective: Cardiovascular disease accounts for more than two thirds of the deaths in patients with type 2 diabetes (T2D) and three fourths of these deaths result from ischemic heart disease. Type 2 diabetes increases CHD risk two to three times in men and three to seven times in women. Yet, only a fraction of the patients needing therapy seem to be recognized and receive adequate antidiabetic and lipid-lowering treatment.

Methods: The epidemiological study DETECT (Diabetes Cardiovascular Risk Evaluation: Targets and Essential Data for Commitment of Treatment) was launched to identify the reasons, the extent and the short-term consequences of unmet needs in patients with high cardiovascular risk. DETECT is a large multistage cross-sectional and prospective 12-month study of 70000 consecutive patients in over 3000 primary care offices, nationwide. A subset of 7500 patients were characterized by an extensive standardized laboratory program and were followed up over 12 months.

Results: According to the guidelines of the American Diabetes Association (fasting glucose > 126 mg/dl, no caloric intake for at least 8 h) or clinical history, 20% of the patients were identified as diabetic. T2D was more frequent in men (32.5%) than in women (16.3%). The prevalence of T2D increased with advancing age of the patients (33.5% at the age of 70 to 79 years). Surprisingly, only 62% of the diabetic patients were previously recognized by the physicians, more than one third was newly identified by our screening program. Only 70% of the known patients with T2D received antidiabetic medication (34.2% metformin, 16.7% insulin, 9.5% sulfonylurea, 9.6% others) and about one third was treated with lipid-lowering medication. The majority of the diabetics did not achieve the treatment goals for fasting glucose (65%), HbA1c (32%), LDL cholesterol (76%), and triglycerides (56%). In addition we will report on the findings of the follow-up evaluation with focus on the change of selected laboratory measurements and critical outcomes such as deaths, cardiovascular events or hospitalization.

Conclusions: Our results indicate that a significant proportion of the diabetic patients were not recognized by the physicians and the treatment of T2D was often insufficient. Patients with T2D are at high risk for CHD. However, mainly lipid-lowering therapy in these patients was inadequate.

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