
Preface

Diabetes mellitus is one of the most widespread diseases in industrialized countries. Its global incidence is rising, even in developing countries, following a trend towards urbanization and “Western lifestyle.” The disease exerts a significant impact on patients’ everyday life. While it may go unnoticed initially for a considerable period until the diagnosis is made, the macro- and microvascular complications of diabetes lead to severe symptoms in later stages. The heart, the kidneys, the eyes and the peripheral nervous system are the main targets of hyperglycemic damage, posing a vital threat to the patients.

The foremost tool to avoid diabetic complications is tight blood glucose control. However, the damaging influence of former suboptimal metabolic control extends into the future, even after optimization of glucose levels, thus calling for specific treatment options reaching beyond optimizing metabolic control. Recent insights into the pathophysiology and pathogenesis of diabetic complications have indicated a potential for therapeutic interventions which affect the involved damaging pathways of glycolysis. Of particular interest is the effect of thiamine and the thiamine monophosphate derivative benfotiamine which have been successfully used in experimental and clinical studies of diabetic retinopathy, nephropathy and neuropathy.

The current knowledge of pathophysiology and pathogenetically-based treatment options for diabetic complications was reported and discussed at an international expert workshop, held on the occasion of the 44th Meeting of the EASD (European Association for the Study of Diabetes) in Rome in September 2008. This book is based upon the lectures held at that meeting, on the discussion that followed and on the associated literature. It is intended for all health-care workers who deal with the challenging task of caring for patients with diabetes mellitus, aiming to ameliorate the burden of the disease and to improve the patients’ quality of life.

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