

# Hypertension in Diabetes: Controlling a Critical Comorbid Condition

## Preface

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Diabetes is the leading cause of renal failure in the United States. In 2002, diabetes accounted for 44,000 new cases of end-stage renal disease, or 44% of all new cases. Rates of kidney disease are higher in Hispanic, African-American, and Native-American populations. Hypertension is a major factor in the development of kidney disease and makes a significant contribution to other microvascular and macrovascular complications. This *Diabetes Spectrum* From Research to Practice section will address the treatment of hypertension and a multifactorial approach to slowing the progression of kidney disease.

In our first article (p. 18), Phillip M. Hall, MD, of the Cleveland Clinic Foundation in Cleveland, Ohio, sets the stage for understanding diabetic nephropathy by describing the numerous mechanisms contributing to renal impairment in diabetes. His discussion includes the role of hypertension and the importance of controlling hypertension in diabetes. Based on these factors, he then describes clinical strategies for preventing the onset and progression of diabetic nephropathy. Interested readers are directed to the Cleveland Clinic Disease Management Project website ([www.clevelandclinicmeded.com/diseasemanagement/nephrology/slowrenal/slowrenal.htm](http://www.clevelandclinicmeded.com/diseasemanagement/nephrology/slowrenal/slowrenal.htm)) for additional information on the topic of slowing the progression of kidney disease.

Our second article (p. 25) is a comprehensive review of the management of hypertension in diabetes by Barry Stults, MD, and Robert E. Jones, MD, FACP, FACE, of the University of Utah in Salt Lake City. The authors describe the epidemiology of hypertension in diabetes and its contribu-

tion to diabetes complications. Next, they help readers understand why it is so difficult to reach treatment goals for hypertension in people with diabetes. Finally, they unravel the confusing body of literature on the treatment of hypertension. Their discussion includes a thorough description of the benefits and limitations of each class of antihypertensive agents and where each best fits in the treatment plan for hypertension.

Finally, Marion J. Franz MS, RD, CDE, an independent diabetes dietitian based in Minneapolis, Minn., describes the important role of medical nutrition therapy in the treatment of hypertension and albuminuria (p. 32). She reviews evidence of the beneficial effects of multiple lifestyle modifications and evaluates and places into context each intervention. This article stresses the importance of implementing multiple interventions and offers advice and practical examples for putting the nutrition recommendations into action.

These articles are meant to equip practitioners with the information they need to better prevent and treat diabetic nephropathy. By understanding the contributing factors, providers may develop a comprehensive approach to the problem. By understanding the treatment of hypertension, providers will be able to address effectively perhaps the most important variable in the progression of kidney disease in diabetes. Finally, medical nutrition therapy and lifestyle modification must be implemented for allopathic interventions to be effective. By understanding the role and effectiveness of each lifestyle element and how to simultaneously address them, providers will facilitate better clinical outcomes.