Health Policy Newsletter

Volume 13 Number 1

March, 2000

Article 2

The Jefferson Center for

Diabetic Kidney Disease

Kumar Sharma, MD* Tracey McGowan*

* Thomas Jefferson University

Copyright ©2000 by the authors. *Health Policy Newsletter* is a quarterly publication of TJU, JHS and the Office of Health Policy and Clinical Outcomes, 1015 Walnut Street, Suite 115, Philadelphia, PA 19107.

Suggested Citation:

Sharma K, McGowan T. The Jefferson Center for Diabetic Kidney Disease. Health Policy Newsletter 2000; 13(1): Article 2. Retrieved [date] from http://jdc.jefferson.edu/hpn/vol13/iss1/2.

The Jefferson Center For Diabetic Kidney Disease

End-stage renal disease from diabetes carries with it a risk of death that few people appreciate. Patients with this disease carry greater risk of death within five years than patients with newly diagnosed HIV or newly diagnosed breast cancer. Diabetic nephropathy has increased enormously and now accounts for over 40% of all new cases of endstage renal failure in the United States.1 Over the past 20 years, diabetic nephropathy has increased over ten-fold in incidence in the state of Pennsylvania.¹

What are the factors underlying this alarming trend? With the knowledge gained from studies showing the benefits of ACE inhibitors in reducing proteinuria and retarding progressive renal disease², it was assumed that diabetic nephropathy would soon be another victim of medical success. This has not proved to be the case for several reasons: 1) the pool of patients with the potential to develop nephropathy has increased due to both better medical care and to the increasing number of obese adult-onset diabetic patients, and 2) ACE inhibitors can decrease the rate of progression, but only if the patients attain optimal blood pressure control.

Based on two large clinical trials, the target blood pressure for the diabetic patient with proteinuria should be less than 150/85 mm Hg and ideally at 125/75 mm Hg ^{3,4}. The challenge of caring for the diabetic patient with evidence of kidney disease is to protect those remaining delicate nephrons from being exposed to ongoing high blood pressures and elevated blood sugars. Careful attention to these basic issues can mean the difference between prolonged preservation of adequate renal function and the need for renal replacement therapy. Delivering optimal care to these patients remains an ongoing challenge to the physician. At Jefferson, we have formed a Center for Diabetic Kidney Disease (CDKD) to increase both public awareness of diabetic nephropathy and to educate physicians about the importance of aggressive intervention. The CDKD at Jefferson integrates the resources of clinicians and researchers from the divisions of Nephrology and Endocrinology to provide intensive management of the patient with established diabetic nephropathy. Patients benefit from receiving care in one team-oriented setting with nephrologists, endocrinologists, and dieticians working closely together and in coordination with the primary care physician. The CDKD has evaluated and managed more than 300 patients since its inauguration in 1996.

Current clinical research studies at the CDKD are focused on determining optimal blood pressure lowering agents, evaluating new anti-fibrotic agents that may prevent progression of nephropathy, and identifying DNA polymorphisms and other markers that may predict the incidence and progression of nephropathy. To schedule an appointment or for more information about the Jefferson Center for Diabetic Kidney Disease, please call 215-503-6950.

(Members of the Center for Diabetic Kidney Disease include Serge Jabor, endocrinologist; Tracy McGowan, nephrologist and clinical research investigator; Barbara Whedon, nutritionist; Barbara Francos, clinical research coordinator; and Dana Wames, administrator.) Kumar Sharma and Tracey McGowan: The Jefferson Center for Diabetic Kidney Disease

REFERENCES

1. United States Renal Data System: Annual Report. Incidence and Prevalence of ESRD. *Am J Kidney D* 1999;34S1:S40-S50.

2. Lewis EJ, Hunsicker LG, Bain RP, Rohde RD. The effect of angiotensin-convertingenzyme inhibition on diabetic nephropathy. *N Engl J Med* 1993;329:1456-1462.

3. UK Prospective Diabetes Study Group. Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: UKPDS. *BMJ* 1998;317:703-713.

4. Peterson J, Adler S, Burkart J, Greene T et al. Blood pressure control, proteinuria, and the progression of renal disease. The Modification of Diet in Renal Disease Study *Ann Int Med* 1995;123:754-762.

About the Authors

Kumar Sharma, MD, is Director of the Center for Diabetic Kidney Disease and Associate Professor of Medicine in the Department of Medicine, Division of Nephrology at Jefferson Medical College, Thomas Jefferson University. Tracey McGowan is Assistant Professor of Medicine in the Department of Medicine, Division of Nephrology at Jefferson Medical College, Thomas Jefferson University.