

PROJECT BRIEF

Angiotensin Converting Enzyme I/D Polymorphism in Hispanic/Latino Patients with Type 2 Diabetes and its Relationship with Microalbuminuria

Background

Diabetes affects approximately 6-8% of the general population in the U.S. at a cost of over \$130 billion annually. In Milwaukee County, there is an estimated 49,400 people (7.2%) diagnosed with diabetes and an additional 20,980 (3.1%) who remain undiagnosed¹. Diabetic nephropathy, a kidney condition related to diabetes, represents approximately 40% of new cases of end stage renal failure. There is considerable racial/ethnic variability in the condition. Hispanic/Latino patients are two to four times more likely to suffer complications. It is essential to examine the prevalence of the genetic makeup related to diabetic nephropathy to determine if it is contributing to a high incidence of complications. The Hispanic/Latino population might benefit by receiving more targeted interventions and drug therapy that could save health care dollars and reduce patient suffering.

Objectives

- Determine if a specific genetic (DD genotype) makeup occurs more in Hispanic/Latino patients
- Examine if the same genetic makeup leads to an increased severity of diabetic nephropathy
- Explore whether the Hispanic/Latino patients are at higher risk for kidney complications as a result of diabetes

Timeline

October 2007 – December 2010

Population

This pilot project enrolled 14 Hispanic/Latino and 11 Caucasian individuals diagnosed with type 2 diabetes from-Aurora Health Care Family Care Practice clinics. The study includes both English speakers and non-English speakers.

Funding Source

Wisconsin Network for Health Research

Institutional Partners

University of Wisconsin Hospitals and Clinics, Gundersen Lutheran Medical Foundation, Marshfield Clinic Research Foundation, Aurora Health Care/Center for Urban Population Health

Local Investigators and Staff

Aurora UW Medical Group
Jake Bidwell, M.D.
Dennis Baumgardner, M.D.
John Brill, M.D., M.P.H.
Rebecca Schultz, R.N., F.N.P.

Center for Urban Population Health

Jennifer Evertsen, M.S.
Jennifer Kroll, B.A.
Ruth Perez, B.A.
Amanda Joyce, B.S.

To learn more, contact: Jennifer Evertsen,
(414) 219-5594 or
jennifer.evertsen@aurora.org

1. National Kidney Foundation of Wisconsin and Wisconsin Lions Foundation. *The 2008 Burden of Diabetes in Wisconsin*. January 2008.

The Center for Urban Population Health is a partnership among the University of Wisconsin School of Medicine and Public Health, the University of Wisconsin-Milwaukee, and Aurora Health Care, Inc. Our mission is advancing population health research and education to improve the health of urban communities.