

Clinical Challenges in Vulnerable CKD Populations

This issue summarizes clinical issues in chronic kidney disease (CKD) patients among 3 special populations: the in utero and pregnant populations, the rapidly aging population, and racial/ethnic minorities.

Pregnancy issues in the CKD population are reviewed by Ojeda and colleagues and by Ingelfinger. Population studies first published in the 1970s suggested a link between the intrauterine environment and adult cardiovascular and kidney disease (CVKD). This concept has gained acceptance through a variety of animal models that confirm abnormal cardiovascular and kidney physiology after intrauterine growth retardation (reviewed by Ojeda and colleagues). The picture in humans remains less clear as reviewed by Ingelfinger. Although ethnic groups at high risk of CVKD tend to have lower birth weights and nephron numbers, links between these factors and CVKD may not be substantiated when examined directly. Part of the difficulty in advancing this idea clinically stems from the inability to accurately estimate nephron number noninvasively in living humans. Treatment strategies for affected individuals remain unclear but include healthy lifestyle and detection and treatment of hypertension. Clearly, perinatal programming of CVKD is a fertile area for future study.

The end-stage renal disease (ESRD) population is now officially geriatric. The median age in 2005 was almost 65 years, and the 75-year-and-older age group is the fastest growing cohort. The aging section of this issue addresses 4 clinical aspects of the aging ESRD population that benefit from a geriatric approach to maintaining maximum quality of life. Dr Jassal describes the results of using a geriatric rehabilitation dialysis unit and multidisciplinary team to improve physical function after acute hospitalization. Dr Murray describes the high prevalence of cognitive impairment in the CKD and hemodialysis populations and associated abysmal outcomes. She suggests a required predialysis cognitive screen and the addition of dementia

as a comorbidity on Centers for Medicare & Medicaid Services Form 2728 to improve prediction of prognosis and quality of life on dialysis. Germain and Cohen remind us of the increasing 6-month mortality rates in the aging hemodialysis population. These patients may be better served with a conservative, palliative approach that does not include initiation of dialysis. They conclude by discussing the barriers to and goals of palliative care in the CKD/ESRD population. St. Peter provides her perspective as a doctor of pharmacology on the effect of the complexities of Medicare Part D on access to dialysis-related medications. ESRD patients may be especially vulnerable to decreased access and medication nonadherence because of the high proportion of dually eligible ESRD patients, the large number of medications they take, and high prescription drug costs.

The third section includes 4 articles on CKD in racial/ethnic minorities. The scope of the effect of racial and ethnic differences on the incidence of ESRD is discussed by Rios-Burrows and colleagues from the Centers for Disease Control and Prevention. Although minority groups have an excessive burden of kidney disease, there are some hopeful trends; the rate of increase in ESRD incidence has slowed among blacks and decreased significantly among Native Americans, Asians, and Hispanics. The remaining 3 articles in this group describe successful efforts to address CKD in communities at high risk. Soto and Leal discuss a pharmacist-based disease-management initiative designed to reduce risk factors for CKD among diabetic patients seen at community health centers, serving a predominantly Hispanic population in southern Arizona. Narva describes the Indian Health Service Kidney Disease Program, which uses some of the principles of the Chronic Care Model in addressing CKD within a large federal

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agency. This program provides direct care to a population that includes communities with the highest rates of treated ESRD in the world. Lastly, Rodriguez and coworkers describe a project to increase awareness of CKD in a high-risk population in Los Angeles using a collaborative model involving academic, community, and professional partners. The intent of grouping these articles together is not to paint an inappropriately rosy picture of the status of CKD control but to provide some balance to previous discouraging re-

ports of the heavy disease burden in these populations and the barriers to improved care. There is some indication that these and other innovative programs throughout the United States are beginning to make a difference to address the problem of CKD in high-risk populations.

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