

SPECIAL ISSUE Hypertension and nephrology: practical aspects of diagnosis and treatment

AM PLEASED once again to serve as the editor for a special issue of the Cleveland Clinic Journal of Medicine focusing on issues in nephrology and hypertension. I believe this issue will be useful and of high clinical interest.

Drs. Nally, Olin, and Lammert review recent advances in screening for renovascular hypertension, focusing on the sensitivity and specificity of captopril renography, duplex ultrasonography, and magnetic resonance angiography.

Progressive peripheral vascular occlusive disease is a major component of generalized atherosclerosis, and hypertension is a major risk factor for and accelerator of atherosclerosis. Dr. Olin outlines the specific treatment goals for hypertensive patients with peripheral vascular disease.

Dr. Cangiano presents data on the prevalence of hypertension in the rapidly growing Hispanic population, and points out the urgent need for comprehensive studies and treatment efforts among Hispanic Americans.

Cardiac function in hypertension is regulated by the interaction of multiple structural, hemodynamic, and neurohumoral factors. Dr. Fouad explains how hypertension affects both systolic and diastolic performance. Similarly, the renal microcirculation plays a significant role in increasing peripheral vascular resistance in hypertension. Drs. Inman and Stowe and I examine the effects of the various classes of antihypertensive agents on the renal microcirculation, an understanding of which can translate into more effective antihypertensive therapy.

Dr. Avery discusses prevention of infections that pose devastating problems in transplant recipients. Early detection, appropriate prophylactic or preemptive therapy, and close collaboration with the clinical transplant team are important.

Dr. Glassock reviews the growing clinical experience with cyclosporine in glomerular disease. Preliminary experience suggests that cyclosporine can induce improvement or clinical remission in patients with several different histologic types of glomerulonephritis. It may also hold promise for patients with lupus nephritis.

Dr. Braun examines risk factors for coronary artery disease among renal transplant recipients and provides an algorithm for cost-effective periodic reassessment of risk status. Dr. Hull shares the disturbing observation that mortality rates for US dialysis patients are higher than those observed in other industrialized countries and points out the critical need to objectively address the adequacy of dialysis.

Dr. Lewis briefly summarizes two recent landmark clinical trials in diabetic patients. The first showed that tight control of blood glucose with intensive insulin therapy can prevent the vascular complications of diabetes. The second, the Collaborative Study Group trial of angiotensin-converting enzyme inhibition (which Dr. Lewis led) demonstrated a reduced risk of progression to ESRD or dying in patients with type I diabetes treated with captopril. He also highlights current research efforts with aldose-reductase inhibitors and aminoguanidine.

I want to thank my colleagues who have contributed to this special issue. I hope that you, the reader, will share my enthusiasm for this issue of the Journal.

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