Introduction

The kidney serves as the focus for this issue of the Cleveland Clinic Quarterly. First, Dr. Phillip M. Hall offers the clinician an understanding of current tests for the clinical evaluation of renal tubular and glomerular functions. Both are critical to the clinical assessment of renal function.

At the Cleveland Clinic the care of patients with end-stage renal disease dates back to the arrival of Dr. Willem Kolff in the early 1950s. From that time to the present, the Cleveland Clinic has been a leader in dialysis and transplantation. A major thrust of the program has been home dialysis training. Doctors Popowniak, Nakamoto, and Magnusson have provided a comprehensive review of all patients trained for home hemodialysis. My paper offers the reader an opportunity to become familiar with home peritoneal dialysis as an alternative to hemodialysis.

Renal transplantation presents many problems to the transplant surgeon, one being the revascularization of donor kidneys that have multiple vessels. Dr. Lynn Banowsky and colleagues, from the Departments of Urology and Hypertension and Nephrology, have reviewed their experience with the conjoined arterial anastomosis as an aid in revascularizing donor kidneys with multiple renal arteries.
The knowledge that there are 20 to 23 million hypertensive persons in the United States, half of them untreated or inadequately treated, has prompted an aggressive public and professional education program emphasizing the importance of drug treatment for patients with sustained hypertension. Dr. Ray W. Gifford, Jr. provides the reader with a comprehensive review of the new antihypertensive drugs and their clinical application.

We are indebted to Dr. Sebastian A. Cook and colleagues, from the Department of Radiology, for their review of the axial skeletal involvement and roentgenographic characteristics of renal cell carcinomas.

Finally, Mr. Paul S. Malchesky and Dr. Y. Nose have offered a provocative article on a new concept in artificial organ design.