

carry on renal function, as well as upon his technical skill and the nature of the pathological condition present. Tuberculous and pyogenic infections, unilateral and bilateral calculi, hydronephrosis, hypernephromata and congenitally deficient or non-developed kidneys are the conditions in which the test has proven of most value.

The urea, indigo carmine, methylene blue and diastase, cryoscopy, phloridzin, Alberran's polyuria test along with clinical studies and urinalysis of the separated urines will all indicate which is the diseased or more diseased kidney. But in this class of cases, the shortcomings of most of these tests are very evident, since one kidney may be doing two or three times as much work as the opposite one and yet be incapable of assuming the additional work or of carrying on adequate work unaided. It may be doing the major part of the work, but only at the expense of its reserve power. But phthalein has prognostically one great advantage over other functional tests, in that it indicates the absolute as well as the relative value of each kidney, so that one knows not only which is the diseased or more diseased kidney, but the amount of work each is doing relative to the other, and what is yet of greater importance, the amount of work for each relative to the normal, since this allows a prognosis concerning the capacity of the remaining kidney to carry on renal function. In double renal tuberculosis, in which, for instance, the amount of pus from each side is practically the same,\* the phthalein test may demonstrate that one kidney has a function far in excess of the other, in fact so good a function that a successful nephrectomy can be done.

It must be admitted that depressed function, the result of inhibition due to ureteral catheterization, is sometimes encountered, in fact more frequently than we formerly believed. But in every case demanding ureteral catheterization, a total renal determination should also be made through which any discrepancy can be readily detected and error be thereby avoided.

Of prognostic significance also is the development of increased functional capacity in the remaining kidney after a nephrectomy. In those cases in which determination of function has been made after an interval of a month following operation, the capacity has not only been greater than that of the same kidney, but equal to, or

\* Not infrequently in bilateral renal tuberculosis the more recently involved kidney secretes more pus than the other and only through functional tests can the true condition be recognized.