

Clinical or functional studies alone are inadequate from the standpoint of prognosis. The application at any one time of one or a series of functional tests reveals only a limited amount of information, e.g. the excretory power of the kidney at that particular time. This, apart from other considerations, may be of no great prognostic significance. In order to become so the data from such studies must be considered in conjunction with a careful clinical study of the patient, and the underlying pathological processes responsible for the clinical and functional pictures must be recognized, identified and understood.

Aside from or in the absence of clinical studies, repeated functional estimations with the employment of the appropriate tests over a varying period of time will reveal the nature (stationary, progressive, retrogressive) and degree of renal involvement and so prove of prognostic value. But even repeated functional studies prove of greatest value when associated with careful clinical studies, for it has been definitely established that functional pictures carry very different significance in various pathological (clinical and experimental) associations. Diseases may be functionally identical, clinically and prognostically different and vice versa. To illustrate, a very low condition of function as indicated by a very low phthalatein output, together with marked delay in the excretion of chlorides, iodide and lactose, may be encountered in experimental chromium nephroses or in marked passive congestion (experimental or clinical). This may be followed within a week by a practically normal renal function, owing to regenerative processes in the first instance, and to the reestablishing of cardiac compensation and better circulation in the second, whereas findings identical with those originally encountered, occurring in a case of chronic interstitial nephritis, indicate impending uremia and a very grave prognosis. Again, identically low functional capacity in cases of urinary retention, associated with pyelonephritis and hydronephrosis on the one hand, and in chronic nephritis on the other, do not have the same prognostic significance since the surgical condition is amenable to treatment, whereas no efficient therapy is at hand in chronic nephritis. From this, the necessity of understanding the absolute significance to be attached to the findings of any functional test becomes apparent. Lepine has objected to the employment of any one substance for the purpose of estimating functional capacity of the kidney on the ground that the kidney does not excrete all substances with the same