## THE PROGNOSTIC VALUE OF FUNCTIONAL TESTS.

phthalein and lactose, etc., association with the continuous marked and increasing accumulation of urea, or total incoagulable nitrogen, or low serum freezing point, one is perfectly safe in predicting the early appearance of uremia, regardless of the underlying pathological condition.

Uremia once present, the clinical severity is not a safe criterion for prognosis. Apparently desperate conditions sometimes reveal a fairly good renal function with an ultimate recovery, whereas very mild symptoms may be present until shortly before death. It always, however, indicates a serious condition, always calls for immediate therapeutic consideration and always suggests a grave prognosis, but it does not always indicate a hopeless one.

It has already been intimated that identical functional pictures carry very different prognostic significance in different clinical and pathological associations. Extremely low functional capacity in chronic nephritis means death, whereas in obstruction in the lower urinary tract with urinary retention and back pressure, the injury may be mostly functional, so that following appropriate treatment a fair or good capacity is again established. Nothing is more surprising than the rapidity and extent of the functional and clinical improvement. Whenever renal function markedly increases, surgical interference is much less liable to be followed by post-operative uremia, whereas in practically all cases with persistent low function it has followed operation used as a last resort, and death has ensued.

Markedly different clinical and functional conditions are encountered even in the medical uremia. Some cases of mild uremia, with nausea, vomiting and even stupor, show a phthalein output which is relatively high, 20-35 per cent. for two hours. This type is much more apt to be associated with cardiac or vascular changes, with œdema frequently a prominent feature. The uremia symptoms may here be an expression of a very different pathological condition than that encountered at other times, e. g., œdema of brain rather than a pure toxemia. These cases often improve and leave the hospital; if death supervenes, it is usually a cardiovascular affair and not a typical uremia.

Very occasionally with very low excretory function (traces of phthalein) and marked cumulative phenomena, the patient will continue to live in a chronic uremia for a surprisingly long time. In several instances such a patient has lived for some months, and in