THE PROGNOSTIC VALUE OF FUNCTIONAL TESTS.

The physical examination showed a pale boy with rather dry skin and with no demonstrable cardiac hypertrophy. His maximum blood pressure was ninety-five,—the radial arteries were, however, palpable, and thicker than one ordinarily sees in a small boy. The eye grounds showed no changes. The 'phthalein test, a week after entry, showed a total excretion in two hours of 7 per cent., and on the following day, the excretion was but 3.1 per cent. The test enabled us properly to interpret symptoms that we might well otherwise have regarded as those of diabetes insipidus. Within a day or two, the quantity of urine began to diminish, a trace of albumen appeared, and, inside of a week, the boy died in uraemic coma.

At the medical clinic of the Johns Hopkins University, we have already followed to autopsy probably fifty cases in which the 'phthalein test has been carefully made. In many instances, our ante-mortem opinion as to the extent of renal change, based upon the studies previously referred to, has been recorded. We are at present tabulating these cases, in the hope that conclusions of some value may be justified.

As Dr. Janeway has pointed out, we are concerned here in the main with chronic progressive disease, the ætiology of which is still, in many instances, uncertain, with conditions to combat which we have, at present, few weapons of decisive value. With what means we have now at our command, we have considerable power to detect renal disease. The most important immediate question which confronts us in many cases is as to the extent of the damage done and what is the outlook for the future. Let us not forget that these tests are tests of function and not tests of anatomical change. And, after all, that which is important for us to know is not so much what the kidney looks like, but how permanently are its functions impaired, and especially, what are the limits of its present powers, and how long may they be expected to last-when may we look for the onset of fatal decompensation? Here we must acknowledge still our serious limitations, for we can not invariably test the limits of functional capacity any more than we can test the exact limits of the compensatory power of the heart muscle. How far we can approach this has been brought out by Dr. Rowntree and by Dr. Christian. These are, however, questions of special importance in slow chronic nephritis.

When the excretion of lactose is suppressed, when the 'phthalein excretion is under 10 per cent. in two hours, where a previous per-

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