

later the patient became irrational, dying within forty-eight hours in uraemic convulsions. No autopsy was obtained.

The following cases shows even more strikingly the ability of the phthalein test to reveal the presence of nephritis in the absence of any definite clinical evidence.

L. G., age 12, admitted March 27, 1911, as an interesting case of diabetes insipidus. The past history contained nothing of importance except that large quantities of urine had been voided for some time and he experienced marked thirst. He was well nourished, not anaemic and apparently a normal looking boy. His B. P. ranged around 100 mm. Hg. Some thickening of the radial arteries was noted. No definite eye changes. The urine on admission was large in amount 2000-2500 c.c., clear, S. G. 1005-1010. *No albumin, no casts.* At this time no suspicion of nephritis was entertained. The phthalein test performed March 28th showed an output of only 7 per cent. for two hours. Three days later only 3 per cent. was excreted. With the exception of the phthalein findings absolutely no evidences of nephritis were present at this date. A week later he developed headaches, and a trace of albumin in the urine appeared. He rapidly became uraemic and died April 9, 1911.

Autopsy: A most intense grade of chronic interstitial nephritis was present, with almost complete disappearance of the cortex. A slight grade of acute nephritis was superimposed.

Chronic nephritis can exist over a long period without recognition, and may even exist in the absence of albumin and casts in the urine. The following in another case illustrating the presence of nephritis in the absence of positive clinical proof, and also the value of the phthalein test in revealing its existence.

F. G., age 71, who had had six previous admissions for malaria, febricula, acute rheumatic fever and arthritis deformans during the last five years, was again admitted November 7, 1910, for oedema of feet and legs, vertigo attacks of loss of consciousness. Numerous urinalyses during these admissions failed to demonstrate any anomaly except a trace of albumin at one single examination. An advanced arteriosclerosis and high blood pressure were recorded on previous admissions. The chest was emphysematous, the heart sounds distant. Pulse 52—regular. B. P. 220. Urine: pale, 1012, acid, albumin—occasional trace, no casts. Phthalein examination showed an output of only 5 per cent. for the first hour and 10 per cent. for the second, indicating a severe grade of nephritis. The next day definite signs of broncho-pneumonia appeared, and the patient died five days later. Autopsy: Atrophy of the right kidney as the result of an old thrombosis of right renal artery, with chronic diffuse nephritis on the left side, small granular kidney.