

RESULTS

In a series of 56 cases of medical nephropathies, 60 diastase, 41 phthalein, 30 urea determinations in the urine, together with 27 freezing points, 44 urea or total incoagulable nitrogen estimations in the blood-serum have been made. Opportunity to compare the functional findings with the anatomical changes present in the kidney at autopsy has been afforded in fifteen instances. For ease of presentation and discussion of the results, the cases presented in the accompanying table have been grouped as previously⁸ into Section A, mild nephritis; B, severe nephritis; C, myocardial insufficiency; D, cardiorenal disease.

Group A—Mild Nephritis.—Twelve cases fall into this group. The lowest phthalein encountered was 40 per cent. for two hours, yet no diastatic activity could be detected in two cases, while $d \frac{38''}{30'}$ was less than 2 in two other instances. Details concerning two of these cases can be seen from the following case reports:

CASE 1.—W. B., 31,744. The patient, a physician, aged 45, consulted Dr Barker concerning his shortness of breath. His family history was not of particular interest, nor was his past history, except for two attacks of gout and occipital headache persisting for years. Under strain the patient became weak, nervous and irritable.

For some years he had been aware of the fact that he had a slight albuminuria, a few casts and a slightly increased B. P. The blood picture was practically normal. The eye grounds normal except for slight blurring of upper and nasal margin. Except a B. P. varying from 130 to 160 the physical examination revealed nothing of importance. The Wassermann was negative.

CASE 5.—J. B. P., 30,492.—This patient, 64 years of age, had had the ordinary diseases of childhood, pneumonia as a young man, one attack of gonorrhea followed by stricture, pyorrhea alveolaris for twenty years and an attack of rheumatism fourteen years ago. For four years he has had to urinate once during the night.

Present illness dated back six weeks, starting with slight pain in region of left kidney. Urinalysis showed albumin and casts, whereupon his family sent him in for study.

Physical examination revealed slightly palpable radials, B. P. 135, an occasional extrasystole which later disappeared, and a faint aortic systolic murmur which frequently disappeared in erect posture. The Roentgen-ray showed slight dilatation of the arch. The blood picture was normal and the eye grounds showed slight blurring of part of margin of disc. The vessels were slightly tortuous, two small patches suggesting exudate in the left eye. There were no scars or hemorrhages in either eye.

In the remaining eight cases the diastatic findings were in harmony with those of the other tests, two cases showing but a slight reduction in diastatic activity, the others appearing normal.

The findings in Case 7 are interesting. This was considered an acute exacerbation, mild in type, in the course of a chronic nephritis. However, the phthalein was considerably reduced, 41 per cent. for

8. Rowntree and Fitz: THE ARCHIVES INT. MED., 1913, xi, 258.