fluorescence 540 m μ). A blank (1 ml. of distilled water) and one or more standards (1 ml. of a 0.5 μ g./ml. solution of 5HT base) are run throughout the procedure.

RESULTS

The compound extracted from the platelets shows the same fluorescent characteristics as pure serotonin (Fig. 1) and are known to be highly specific (Weissbach *et al.*, 1958). There is a good correlation between the number of platelets and 5HT extracted, in the range considered (Fig. 2). Table I shows the serotonin level per 10⁹ platelets in 18 normal subjects.

In Table II the average values and variability obtained by our findings are compared with those described by other authors, using different methods.

DISCUSSION

The method described is based on two facts: 1, the highly specific fluorescent characteristics of serotonin, which make its isolation in tissues containing a high level of this substance unnecessary, and 2, blood serotonin is concentrated in platelets. This procedure does not determine free plasma serotonin, which is generally considered to be extremely low, even in carcinoid (Robertson and Andrews, 1961). The obtained results agree well with those already described in the literature.

Platelet serotonin has often been evaluated by the method of Udenfriend, Weissbach, and Clark (1955), but the procedure is tedious and the amount of blood required relatively high (about 20 ml.).

Both these disadvantages seem to be overcome by our method. The facility with which it can be carried out, the short time and the small amount of blood necessary, and the possibility of running many samples at the same time make this procedure particularly suitable for clinical research. The reliability of the method is also shown by the study of platelet serotonin modifications after administration of iproniazid or Rauwolfia alkaloids (Fig. 3). These variations are in agreement with those detected by other methods and reported in the literature.

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Book reviews

M.R.C. Spec. Rep. Ser. med. Res. Coun. (Lond.), No. 300.

CEREBRAL INFARCTION: THE ROLE OF STENOSIS OF THE EXTRACRANIAL CEREBRAL ARTERIES By Peter O. Yates and Edward C. Hutchinson. (Pp. viii + 95 + index; 20 plates + many diagrams. 14s.) London: Her Majesty's Stationery Office. 1961.

This special report presents in extended detail the material upon which the authors' well-known papers on carotico-vertebral stenosis are based. There can be no doubt that this work has been of great importance in directing the attention of both pathologists and clinicians to the arteries in the neck—so long and so inexplicably neglected as they were.

There are naturally some features open to criticism. The group of cases on which the report is based has a very mixed structure and it is therefore doubtful if some of the analyses to which the group is subjected have any real significance. The assumption that certain arbitrary degrees of arterial stenosis are 'significant' without serious consideration of the haemodynamic problems involved seems unjustified. Definitions of stenosis are not always clear and it is a pity that differing standards were used for the intracranial (p. 11) and the extracranial (p. 16) arteries. At least one reader is left in doubt as to the meaning of such expressions as 'narrowing of the lumen of any degree up to three quarters'. Surely, also, it is an overstatement to say (p. 14) that intramural vessels 'usually' arise from the lumen: most workers have regarded this as the exception rather than the rule.

The most serious criticism of this study, however, is the absence of any satisfactory control group: it is surely essential as a baseline to know the incidence of carotico-vertebral disease in a group of subjects of similar age and in whom there is no evidence of ischaemic cerebral disease, and the absence of such a control group has already led to challenge of the conclusions from one quarter.

The importance of the work, however, remains. There are few who can claim, as these authors can, to have changed post-mortem technique; for it is now obvious that any pathologist who fails to examine the carotico-vertebral system in a case of ischaemic cerebral disease is neglecting an important part of the necropsy.

T. CRAWFORD

FEARON'S INTRODUCTION TO BIOCHEMISTRY, 4th ed. Edited by W. J. E. Jessop. (Pp. viii + 473; illustrated. 30s.) London: William Heinemann.

Because of Fearon's untimely death in 1959, the work has been edited by Professor Jessop, and it is never an easy task to take over another man's structure, especially so here because the design of the work is somewhat unusual. The approach to biochemistry of the earlier editions has been retained: it provides the answers to a number of questions which an intelligent beginner will ask and which remain unanswered in the more orthodox books. Unfortunately, the revision of the text for this edition has not been adequate, and the result shows a lack of balance

associated with some unhappy errors of omission and commission. Porphobilinogen is described as a dipyrrole pigment, and there is little attempt to explain the sequence of porphyrin synthesis about which we have some knowledge. It seems an unnecessary complication to discuss the constitution of the steroid hormones in two different chapters, and no mention is made of the 17-ketogenic steroids. There is no adequate summary of urinary steroid analysis but two-thirds of a page is devoted to summarizing the assay of the adrenalines. The account of the ornithine cycle needs clarification. Some parts of the book, such as the chapter on lipid metabolism, are very good. There are one or two unfortunate misprints: on page 156 the iron has been omitted from the skeleton formula of haem; on page 308 Krebs' name is misspelt.

It is to be regretted that the book cannot be recommended.

ARTHUR JORDAN

ONE-DAY COURSE ON THE DIAGNOSIS AND MANAGEMENT OF ANAEMIA

A one-day course entitled 'The Diagnosis and Management of Anaemia' was held at the Royal Infirmary,

Sheffield, on 1 December 1961. It was organized for the Committee on Haematology of the Association of Clinical Pathologists for senior registrars and registrars in clinical pathology, simultaneous courses being held in Glasgow and Oxford. Requests for places on the course in Sheffield were received from 72 consultants, senior registrars, and registrars in general medicine, surgery, and other specialties.

The following subjects were discussed:—

The Diagnosis and Management of Megaloblastic Anaemias (Dr. H. T. Swan); The Diagnosis and Management of Iron-deficiency States (Dr. I. McLean Baird); Radioactive Isotopes in the Diagnosis and Management of Anaemias (Dr. G. R. Tudhope); The Diagnosis and Management of Leukaemias (Dr. E. K. Blackburn); The Diagnosis and Management of Lupus Erythematosus (Dr. I. B. Sneddon); The Diagnosis and Management of Alimentary Bleeding (Professor A. W. Kay); The Diagnosis and Management of Haemolytic Anaemias (Dr. H. T. Swan); Slide Quiz (Dr. R. P. Britt, Mr. J. H. Monaghan); The Diagnosis and Management of Aplastic Anaemias (Dr. S. Varadi); The Diagnosis and Management of Haemorrhagic Disorders (Dr. E. K. Blackburn); and Thromboplastin Generation Test (Miss J. Ripley).