

specimens unsuitable for vitamin B12 assay, since the ascorbate is said to destroy B12 present as hydroxycobalamin. The effect of ascorbate (5 to 10 mg.) on the preservation of *L. casei* activity was investigated by bleeding 30 normal subjects. The blood sample was divided into three portions. One aliquot was added to a tube with 5 to 10 mg. of dry ascorbate and the serum retained. Ascorbate, 5 to 10 mg., was added to the serum from the second aliquot. Serum from the third portion was retained without any addition. All the sera were stored at  $-20^{\circ}\text{C}$ . and *L. casei* activity assayed periodically over the next six

months. The results (Fig. 3) confirm the observations of Waters and Mollin (1961) that ascorbate largely prevented the decline of *L. casei* activity in storage.

## REFERENCES

- Baker, H., Herbert, V., Frank, O., Pasher, I., Hutner, S. H., Wasserman, L. R., and Sobotka, H. (1959). *Clin. Chem.*, 5, 275.  
 Herbert, V. (1961). *J. clin. Invest.*, 40, 81.  
 Toepfer, E. W., Zook, E. G., Orr, M. L., and Richardson, L. R. (1951). *Folic acid content of foods*. Agriculture Handbook No. 29. United States Department of Agriculture. Govt. Ptg. Off. Washington, D. C.  
 Waters, A. H., and Mollin, D. L. (1961). *J. clin. Path.*, 14, 335.

## Broadsheets prepared by the Association of Clinical Pathologists

The following broadsheets (new series) are published by the Association of Clinical Pathologists. They may be obtained from Dr. R. B. H. Tierney, Pathological Laboratory, Boutport Street, Barnstaple, N. Devon. The prices include postage, but airmail will be charged extra.

- |   |  |
|---|--|
| <p>3 The Detection of Barbiturates in Blood, Cerebrospinal Fluid, Urine, and Stomach Contents. 1953. L. C. NICKOLLS. 1s.</p> <p>4 The Estimation of Carbon Monoxide in Blood. 1953. D. A. STANLEY. 1s.</p> <p>13 The Identification of Serotypes of <i>Escherichia coli</i> Associated with Infantile Gastro-enteritis. 1956. JOAN TAYLOR. 1s.</p> <p>16 Preservation of Pathological Museum Specimens. 1957. L. W. PROGER. 1s.</p> <p>17 Cultural Diagnosis of Whooping-cough. 1957. B. W. LACEY. 1s.</p> <p>20 Investigation of Porphyrin/Porphyruria. 1958 (reprinted 1962). C. RIMINGTON. 2s.</p> <p>23 The Dried Disc Technique for Bacterial Sensitivity Tests. 1959. R. W. FAIRBROTHER and J. C. SHERRIS. 1s.</p> <p>24 Safe Handling of Radioactive Tissues in the Laboratory and Post-mortem Room. 1959. R. C. CURRAN. 1s.</p> <p>26 The Periodic Acid-Schiff Reaction. 1959. A. G. E. PEARSE. 1s.</p> <p>28 Daily Fatty Acid Excretion. 1960. A. C. FRAZER. 2s.</p> <p>29 The Preparation of Bone for Diagnostic Histology. 1960. D. H. COLLINS. 2s.</p> <p>30 Control of Accuracy in Chemical Pathology. 1961. G. H. GRANT. 4s.</p> <p>31 Investigation of Haemorrhagic States with Special Reference to Defects of Coagulation of the Blood. 1961. E. K. BLACKBURN. 4s.</p> <p>32 Detection of Resistance to Streptomycin, P.A.S., and Isoniazid in Tubercle Bacilli. 1961. R. CRUICKSHANK and S. M. STEWART. 2s.</p> | <p>33 The Laboratory Detection of Abnormal Haemoglobins. 1961. H. LEHMANN and J. A. M. AGER. 4s.</p> <p>34 Titration of Antistreptolysin O. 1961. H. GOODER and R. E. O. WILLIAMS. 2s.</p> <p>35 The Estimation of Faecal 'Urobilinogen'. 1961. C. H. GRAY. 2s.</p> <p>36 Quantitative Determination of Porphobilinogen and Porphyrins in Urine and Faeces. 1961. C. RIMINGTON. 3s. 6d.</p> <p>37 The Paper Electrophoresis of Serum and Urinary Proteins. 1961. G. FRANGLEN and N. H. MARTIN. 4s.</p> <p>38 The Augmented Histamine Gastric Function Test. 1961. M. LUBRAN. 2s.</p> <p>39 Investigation of Haemolytic Anaemia. 1961. J. G. SELWYN. 2s.</p> <p>40 Short-term Preservation of Bacterial Cultures. 1962. E. JOAN STOKES. 2s.</p> <p>41 Serological Tests for Syphilis. 1962. A. E. WILKINSON. 6s.</p> <p>42 The Determination of Glucose 6-Phosphate Dehydrogenase in Red Cells. 1962. T. A. J. PRANKERD. 2s.</p> <p>43 Mycological Techniques. 1962. R. W. RIDDELL. 3s. 6d.</p> <p>44 The Laboratory Investigation of Catecholamine Secreting Tumours. 1963. M. SANDLER and C. R. J. RUTHVEN. 2s.</p> <p>45 Diagnostic Test for Hereditary Galactosaemia. 1963. V. SCHWARZ. 2s.</p> <p>46 The Determination of Serum Iron and Total Iron Binding Capacity. 1963. A. JORDAN and D. A. PODMORE. 2s.</p> |
|---|--|

It would be of interest to know whether the lower glyceride impurity in the triolein has any effect on the  $^{131}\text{I}$  triolein absorption test and this is being investigated using a purified  $^{131}\text{I}$  triolein for comparison.

We are grateful to Professor E. M. McGirr, Dr. J. H. Wright, Dr. J. Badenoch, and Dr. V. Lawrie for their advice and encouragement.

## REFERENCES

- Cox, A. G. (1961). *Brit. med. J.*, 2, 933.  
 Horning, M. G., Williams, E. A., and Horning, E. C. (1960). *J. Lipid Res.*, 1, 482.  
 Lakshminarayana, G., Kruger, F. A., Cornwell, D. G., and Brown, J. B. (1960). *Arch. Biochem.*, 88, 318.

- Lubran, M., and Pearson, J. D. (1958). *J. clin. Path.*, 11, 165.  
 Mangold, H. K. (1961). *J. Amer. Oil Chem. Soc.*, 38, 708.  
 Mattson, F. H., and Volpenheim, R. A. (1962). *J. Lipid Res.*, 3, 281.  
 Stanley, M. M., and Thannhauser, S. J. (1949). *J. Lab. clin. Med.*, 34, 1634.

## ADDENDUM

Since this paper was written, analysis of a purified triolein (99% triglyceride) labelled with  $^{131}\text{I}$  at the Radiochemical Centre, Amersham, has revealed 16% lower glycerides and 4% oleic acid in the end product. This suggests that the mode of preparation (possibly heating to 60°C. to evaporate solvent) must contribute to the impurities of  $^{131}\text{I}$  triolein.

---

## The January 1964 Issue

### THE JANUARY 1964 ISSUE CONTAINS THE FOLLOWING PAPERS

- Coagulation and fibrinolysis in injured patients D. INNES and S. SEVITT
- Investigations into the *Euglena* method for the assay of vitamin B<sub>12</sub> in serum BARBARA B. ANDERSON
- The assay of folic-acid activity of liver MYRA C. BENNETT, VALERIE BERRY, I. CHANARIN, and S. ARDEMAN
- The urinary excretion and tissue retention of cyanocobalamin by subjects given repeated parenteral doses J. F. ADAMS
- Blood groups and diabetes mellitus A. L. MACAFEE
- The ABO blood groups of carcinoma of the oesophagus and of benign prostatic hyperplasia W. H. BEASLEY
- Rapid adhesive platelet count in whole blood ROBERT D. EASTHAM
- The value of Jirgl's flocculation test in the diagnosis of jaundice JOYCE L. BELL and ROGER WILLIAMS
- The diagnostic value of serum leucine aminopeptidase G. MERICAS, E. ANAGNOSTOU, ST. HADZIYANNIS, and S. KAKARI
- Serum levels of creatine phosphokinase P. D. GRIFFITHS
- A simple technique using 'dialysable' thyroxine for assessment of thyroid status T. M. D. GIMLETTE
- Localization of leucine aminopeptidase isoenzymes B. W. MEADE and S. B. ROSALKI
- Urinary excretion of metabolites of catecholamines in normal individuals and hypertensive patients R. J. GEORGES and L. G. WHITBY
- Antibiotic sensitivity of *Proteus* species MARY BARBER and PAMELA M. WATERWORTH
- An improved method of isolating salmonellae from contaminated desiccated coconut J. B. IVESON, N. KOVACS, and WM. LAURIE
- Some aspects of nasal carriage of staphylococci W. C. NOBLE, R. E. O. WILLIAMS, M. PATRICIA JEVONS, and R. A. SHOOTER
- A pitfall in the cytodagnosis of sputum of asthmatics BERNARD NAYLOR and CONSTANTINE RAILEY
- Gastro-duodenal Crohn's disease J. PRYSE-DAVIES
- Obituary: Matthew Harris O'Connor
- Technical Methods*
- A micromethod for estimating osmotic fragility of erythrocytes S. T. G. BUTTERWORTH
- A simple method for the use of water melon seed preparations in the estimation of blood urea K. A. KHALEQUE, M. G. MUZZAM, and P. ISPAHANI
- Liquid nitrogen storage of haemoglobin variants R. G. HUNTSMAN, B. A. L. HURN, J. LIDDELL, H. LEHMANN, and P. K. SUKUMARAN
- A simple control system for CO<sub>2</sub> incubators B. M. WRIGHT
- Book reviews

Copies are still available and may be obtained from the PUBLISHING MANAGER,  
 BRITISH MEDICAL ASSOCIATION, TAVISTOCK SQUARE, W.C.1., price 18s. 6d.

the reader disagrees with some, he will benefit from considering the alternatives. This book is strongly recommended.

W. A. GILLESPIE

**POISON DETECTION IN HUMAN ORGANS** By Alan S. Curry. (Pp. xxi + 150; 17 tables; 7 text figures. \$6.75.) Springfield, Illinois: Charles C. Thomas, 1963.

This is a book for the hospital as well as for the forensic laboratory written by the Principal Scientific Officer of the Home Office Forensic Science Laboratory, Harrogate. Its emphasis is on the detection of poisons by the most rapid and simple methods available. Up to date and concise, it not only gives advice to the specialist toxicologist on the systematic chemical testing of each organ in a comprehensive analysis but it also provides just the kind of information most useful to the clinical pathologist faced with an urgent decision between poisoning and disease in the unconscious patient or at necropsy.

The introductory chapter, which includes advice on the collection, packing, and preservation of samples, is followed by a most useful chapter describing spot tests on blood and urine and other tests of value in the living patient, including the extraction of poisons soluble in organic solvents for which no simple spot tests are yet available. For a long time we have needed a battery of rapid tests for the detection of the commoner poisons in the living and at the difficult necropsy when, for example, there is no clinical or morphological evidence of poisoning and yet the degree of morbid change, *e.g.*, coronary stenosis, leaves one in some doubt as to whether it is the true cause of death. Now, with the help of the spot tests described in this chapter, together with the one of rapid tests for barbiturates published recently (Curry, 1963; Wallenius, Zaar, and Lausing, 1963), any hospital laboratory should be able to diagnose the majority of cases of poisoning in a couple of hours. The analysis of the contents of the alimentary tract is described in detail in Chapter 3, most of which is equally applicable to the analysis of stomach washings from the living.

In a comprehensive post-mortem analysis, after carrying out the simple spot tests, the reader is advised to turn to the four tests on liver tissue described in the first part of chapter 4: in this way those common poisons for which there are as yet no simple spot tests can be most quickly detected. Tests on other organs and further analyses on blood and urine are then detailed.

There are occasional misprints; these are no doubt inevitable in a new book. Those in the last two urine spot tests in Table 6 on page 49 are worth mentioning. In the test for bromide, '50% fluorescein' should read: 'saturated alcoholic solution of sodium fluorescein'; and in the test for p-amino-phenol, 'add 2-3 drops 1% NaOH and alkaline  $\alpha$  naphthol' should read: 'add 2-3 drops 1%  $\text{NaNO}_2$  and 1 ml. of an approximately 1% solution of  $\alpha$ -naphthol in 10% NaOH'.

My only real criticism is the price of so short a book. It seems most unfortunate that it was published in America and not here as a paper-back at a fraction of the cost, for it would be a valuable addition to the library of any hospital laboratory.

GREGOR GRANT

Curry, A. S. (1963), *Brit. med. J.*, 2, 1040.

Wallenius, G., Zaar, B., and Lausing, E. (1963), *Scand. J. clin. lab. Invest.*, 15, Sup. 69, 252.

**LABORATORY TESTS IN DIAGNOSIS AND INVESTIGATION OF ENDOCRINE FUNCTIONS** Edited by Roberto Escamilla. (Pp. xiv + 514; 135 figures; 89 tables. 78s.) Oxford: Blackwell Scientific Publications, 1962.

This well-produced book is based upon a course of postgraduate lectures given at the University of California. Judged by the description of the posts held by the many contributors, it is based upon the experimental observations of a group of younger investigators who are actively engaged in the work they describe. This leads to a refreshingly direct text which is easily read and comprehended. They give an up-to-date account of the present state of knowledge of this branch of medicine, and they are clearly busily attempting to expand this knowledge.

There are seven sections—pituitary, thyroid, parathyroids, pancreatic islets, adrenals, testes, and ovaries. Each section is introduced by a pathologist, who outlines the tests that are currently available to the clinician for the diagnosis of disorders of that particular endocrine gland. These are followed by a number of lectures devoted to the measurement of one or more functions of that organ.

The introductory lectures will be of particular value to the clinician as they summarize, although somewhat sketchily in places, the very important part that the laboratory must play in the diagnosis of these not uncommon diseases; those on the parathyroid and the testis are particularly good.

The subsequent chapters contain a considerable amount of laboratory and clinical data derived largely from investigations on healthy and diseased human subjects. The laboratory methods employed vary from the simplest, such as the determination of plasma electrolytes, to those using specialized techniques only just beginning to find their way into the routine laboratory, *e.g.*, gas chromatographic, immunological and radioactive tracer methods.

Each chapter is followed by a most useful list of references, many of them to papers giving practical details of the tests discussed. These lists alone make the book a compulsory addition to the library of routine laboratories where the investigation of endocrine disorders is carried out.

Some criticism can be levelled at the text since it is presented from transcripts of the lectures as delivered, rather than as articles written for the reader. This does not, however, detract from their value, and any initial irritation should soon be overcome by the amount of clearly presented information.

This book can be recommended to all who are interested in this fascinating subject, be they clinician or clinical pathologist.

HAROLD MILLER

#### NOTICE TO CONTRIBUTORS

Would intending contributors please send all communications to the Editor, *JOURNAL OF CLINICAL PATHOLOGY*, Dr. A. Gordon Signy, addressed to him at B.M.A. House, Tavistock Square, W.C.1.