

In bone from the aged there is an accumulation of highly fluorescent bone, particularly towards the centre of the shaft, with markedly contrasting poorly fluorescent osteons scattered about.

Osteoid can be distinguished by autofluorescence from recently calcified bone even after the decalcification of the tissue, which must indicate an irreversible alteration of bone matrix on mineralization.

REFERENCES

Amprino, R. (1952). *Z. Zellforschung*, **37**, 144.
 Armstrong, W. G., and Horsley, H. J. (1966). *Nature (Lond.)*, **211**, 981.
 Jowsey, J. (1955). *J. sci. Instrum.*, **32**, 159.
 — (1960). *Clin. Orthop.*, **17**, 210.
 Prentice, A. I. D. (1965). *Nature (Lond.)*, **206**, 1167.
 Sissons, H. A., Jowsey J., and Stewart, L. (1960). In *Proc. 2nd. Int. Symp. X-ray Microscopy and X-ray Microanalysis, 1959*, edited by A. Engström *et al.* Elsevier, Amsterdam.

The July 1967 Issue

Pathological findings in three cases of fungal endocarditis complicating open-heart surgery E. M. MCCONNELL and C. ROBERTS

Histopathology of fatal adenovirus infection of the respiratory tract in young children D. M. O. BECROFT

Asbestos bodies in lungs at necropsy G. HEFIN ROBERTS

'Residual bodies' in sarcoid and sarcoid-like granulomas W. JONES WILLIAMS and D. WILLIAMS

Significance of a 'starry sky' in lymphosarcomata in Britain J. GOUGH

Case of extensive necrosis of the oesophageal mucosa following hypothermia J. L. BRENNAN

Odotogenic tumour of lip F. M. COLE and A. W. JONES

Ossification in the sternum as a means of assessing skeletal age I. C. F. RIACH

The parathyroid oxyphil cells A. C. CHRISTIE

New methods for detecting changes in the surface appearance of human red blood cells A. J. SALSBUARY and J. A. CLARKE

Determination of iron in urine with special reference to the desferrioxamine test O. LUNDVALL and A. WEINFELD

Partial thromboplastin time test with kaolin: diagnosis of haemophilia and Christmas disease without natural reference plasmas SUSAN F. KNIGHTS and G. I. INGRAM

Diagnosis of haemophilia: use of an artificial factor-VIII-deficient human plasma system E. M. ESSIEN and G. I. C. INGRAM

Antithromboplastic and thromboplastic activities of fatty acids W. W. FULLERTON, W. A. BOGGUST, and R. A. Q. O'MEARA

Gel scintillation counting of ¹³¹I in plasma at high efficiencies T. K. BELL

Micrococcaceae from the urinary tract in pregnancy A. P. ROBERTS

Mycoplasma hominis in pregnancy D. M. JONES

'Normal' vaginal microbiology of women of childbearing age in relation to the use of oral contraceptives and vaginal tampons C. A. MORRIS and DELIA F. MORRIS

Survey of the incidence of tetracycline-resistant haemolytic streptococci between 1958 and 1965 J. V. DADSWELL

New slide test for infectious mononucleosis R. J. L. DAVIDSON

Origins of serum alkaline phosphatase J. M. YONG

An interpretation of the elevation of serum alkaline phosphate in disease P. G. HILL and H. G. SAMMONS

Urinary excretion of leucine aminopeptidase in pregnancy D. P. MULLAN

Observations on the collection and handling of blood samples for N.E.F.A. estimation D. V. I. FAIRWEATHER and R. LAYTON

Technical methods

Desferrioxamine chelatable body iron J. FIELDING

Cyanmethaemoglobinometry on the AutoAnalyzer M. G. NELSON

Letters to the Editor

Association of Clinical Pathologists: 78th General Meeting

Book reviews

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 BRITISH MEDICAL ASSOCIATION, TAVISTOCK SQUARE, W.C.1. price 18s. 6d.

the T.T.C. test less sensitive and the number of patients receiving antibiotics in different trials may have varied. Recently pH and osmolarity of the urine have been shown to affect its efficiency as a culture medium and the urine of pregnant women was found to be almost invariably at optimal pH for the growth of *Esch. coli* (Asscher, Sussman, Waters, Davis, and Chick, 1966). Although the pH and osmolarity of the urine are altered in the T.T.C. test, the initial values may affect its sensitivity, and in trials in which it was used to detect asymptomatic bacteriuria of pregnancy the test was found to be reliable and the results were almost identical (Williams and Simmons, 1963; Kincaid-Smith *et al.*, 1964; Pinkerton *et al.*, 1965).

One of the major difficulties in all investigations of urinary tract infection is the collection of specimens suitable for examination, for if sufficient care is not taken the number of contaminating bacteria may exceed 100,000 per ml. Where similar conditions

were artificially created by the addition of bacteria to urine the T.T.C. test was shown to be unreliable (Steers and Jackson, 1963).

REFERENCES

- Asscher, A. W., Sussman, M., Waters, W. E., Davis, R. H., and Chick, S. (1966). *Lancet*, 2, 1037.
 Chard, T., and Cole, P. G. (1963). *Ibid.*, 2, 326.
 Constable, P. J. (1966). *Ibid.*, 2, 195.
 Deutch, M., and Jespersen, H. G. (1964). *Acta med. Scand.*, 174, 191.
 Fairley, K. F., and Barraclough, M. (1966). *Med. J. Aust.*, 1, 93.
 Guze, L. B., and Kalmanson, G. M. (1963). *Amer. J. med. Sci.*, 246, 691.
 Jensen, J. B. (1965). *Lancet*, 2, 1247.
 Kincaid-Smith, P., Bullen, M., Mills, J., Fussell, U., Huston, N., and Goon, F. (1964). *Ibid.*, 2, 61.
Lancet (1964). 2, 77.
 Pinkerton, J. H. M., Houston, J. K., and Gibson, G. L. (1965). *Proc. roy. Soc. Med.*, 48, 1041.
 Sleigh, J. D. (1965). *Brit. med. J.*, 1, 765.
 Simmons, N. A., and Williams, J. D. (1962). *Lancet*, 1, 1377.
 Steers, E., and Jackson, F. W., II (1963). *Ibid.*, 1, 1267.
 Williams, J. D., and Simmons, N. A. (1963). *Ibid.*, 1, 1373.

Reports and Bulletins prepared by the Association of Clinical Biochemists

The following reports and bulletins are published by the Association of Clinical Biochemists. They may be obtained from Mr. J. T. Ireland, Biochemistry Laboratory, Alder Hey Children's Hospital, Liverpool, 12. The prices include postage, but airmail will be charged extra.

SCIENTIFIC REPORTS

- 1 Colorimeters with Flow Through Cells. A Critical Assessment of 4 Instruments. 1965. P. M. G. BROUGHTON and C. RILEY. 13s. 6d.
- 2 Colorimeters: A critical assessment of 5 commercial instruments. 1966. P. M. G. BROUGHTON, C. RILEY, J. G. H. COOK, P. G. SANDERS, and H. BRAUNSBURG. 15s.

TECHNICAL BULLETINS

- 3 Non-recording Spectrophotometers for the Visible and Ultraviolet Ranges. A comparative table of instruments available in Great Britain. May 1965. A. H. GOWENLOCK, P. C. NICHOLAS, and J. H. WILKINSON. 1s. 6d.
- 4 Control Solutions for Clinical Biochemistry. June 1965. P. M. G. BROUGHTON and A. H. GOWENLOCK. 1s. 6d.

- 5 Recording Spectrophotometers. A comparative list of low-priced instruments readily available in Britain. July 1965. P. SEWELL. 2s. 6d.
- 6 A Guide to Automatic Pipettes. A list of more than 100 instruments compiled from manufacturers' literature. August 1965. P. M. G. BROUGHTON. 5s.
- 7 Variability Between AutoAnalyzer Modules. August 1965. B. E. NORTHAM. 1s. 6d.
- 8 Flame Photometers. A comparative list of 15 instruments readily available in Britain. June 1966. C. RILEY. 4s.
- 9 Determination of Urea by AutoAnalyzer. November 1966. RUTH M. HASLAM. 2s. 6d.
- 10 Filter Fluorimeters. A comparative list of 14 instruments. March 1967. HANNELORE BRAUNSBURG. 5s.

moreover the units used are not defined; they are certainly not International Units. Reference to 'cortisol in plasma' directs us to '17-hydroxycorticosteroids' but should read '11-hydroxycorticosteroids'. The causes of elevated serum vitamin B₁₂ levels are recorded but those of decreased values are not. Although a list relating levels of alcohol to symptoms is given, we are not told whether blood or urine figures are being used and the legally important blood level of 80 mg./100 ml. is not mentioned. Whilst a number of sections have been deleted from this edition as not being useful, the retention of the Kepler, Power Robinson test is difficult to justify.

In the preface to the first edition, the author is careful to emphasize the limitations of the approach to clinical chemistry characterized by this book. It is to be feared that most of those who buy will not heed his good advice.

B. W. MEADE

SYMPOSIUM UBER DEN LIQUOR CEREBROSPINALIS. VIENNA, 16th January, 1965. *Wiener Zeitschrift für Neuroheilkunde*, suppl. 1. Edited by Prof. Dr. F. Seitelberger. (Pp. 224; 132 figures. \$19.25.) Vienna and New York: Springer Verlag, 1966.

A symposium concerning various aspects relating to the cerebrospinal fluid was held early in 1965 in Vienna and this volume records some two dozen communications together with the ensuing discussion of each.

Appropriately an excellent pathological and anatomical survey by Professor Seitelberger is recorded first for he was largely responsible for the volume. It is difficult to single out particular papers for the excellence of so many is obvious. These range from aspects of pharmacology, detailed electron microscopic appearances of the choroid plexus and the glia, the cytology of the cerebrospinal fluid itself illustrated by some beautiful photographs, the electrophoretic pattern of proteins and the results of amino acid examinations, especially in Parkinson's disease, Huntington's chorea, and polyneuritis. There are also valuable papers on immunoelectrophoresis, the results of which are well illustrated.

The volume is well produced but is entirely in German; however, all symposia have the failing of not producing abstracts in another language. To those interested in the cerebrospinal fluid it can be well recommended.

J. N. CUMINGS

PRINCIPLES OF MEDICAL STATISTICS 8th ed. By Sir Austin Bradford Hill. (Pp. ix + 381; illustrated. 15s.) London: Lancet Limited, 1966.

Since it was first published before the war, this book has guided several generations of medical research workers. This edition is largely based on the successful seventh edition, but has been expanded in two important sections. With the great increase recently in clinical trials, the chapter dealing with the ethics of these situations has been enlarged; the important statements of the Medical Research Council and the Helsinki declaration are included as an appendix.

The other main change is a last chapter on statistical evidence and inference. This is now a non-mathematical

discussion of the meaning of significance tests and the inferences which can be drawn from differences which are unlikely to be due to chance. The issues are clearly stated and the logical conclusions drawn. This chapter now forms an important guide for anyone interested in medical research, whether or not he intends to employ the numerical methods described in the earlier parts. Written especially for the doctor, this book continues to be one of the best introductions available to the non-mathematician.

I. D. P. WOOTTON

LES TRAITEMENTS ANTICOAGULANTS. Table Ronde des V^e Journées de Thérapeutique de la Faculté de Médecine de Nancy, 26th Mars, 1966. By G. Arnould and others. (Pp. 164; 20 figures. 20F.) Paris: Expansion Scientifique Française, 1966.

This slim publication contains nine papers on heparin and oral anticoagulants given at a meeting held by the medical faculty at Nancy. The participants were all from French universities with a strong local representation.

The introduction by Dr. Soulier, which lays down some important guiding principles governing anticoagulant administration, is excellent. The remaining papers are on the pharmacology of anticoagulant drugs, the principles of laboratory control, and the clinical applications and dangers of therapy.

It would probably have been more helpful at the publication stage to expand the papers to cover their subject more comprehensively and to include adequate references to the published literature. Most of the chapters contain no references at all, and some, e.g., the paper on side effects, do not adequately cover the subject. The international nomenclature for clotting factors was not always used and there was overlap between contribution, e.g., heparin therapy, with differing opinions. Those conversant with the English language literature on anticoagulants will probably find little to change their views or opinions on this controversial subject.

L. POLLER

Symposia

THE THYROID GLAND

Orders for symposia on the thyroid gland and tissue and organ transplantation should be addressed to the Publishing Manager, *Journal of Clinical Pathology*, B.M.A. House, Tavistock Square, London, W.C.1, and those who are entitled to the concessionary price of 25s. for each symposium, as members of the Association or as subscribers to the *Journal of Clinical Pathology* should say so when ordering copies. For all other purchasers the price is 30s. (including postage).