

tion, can stimulate the immune mechanism to produce excess reagin, with resultant biological false-positive reactions to serological tests for syphilis. Most of these seem to be chronic reactions. In certain people multiple blood donation plays some part in the production of the chronic reaction, probably due to repeated stimulation of the immune mechanism.

Reactive screening tests for syphilis found in the serum of blood donors should always be investigated further, preferably by using the TPI

and FTA-ABS tests, as, apart from biological false-positive reactions, a number will indicate a diagnosis of syphilis.

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Reports and Bulletins prepared by the Association of Clinical Biochemists

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SCIENTIFIC REPORTS

3 Automatic Dispensing Pipettes. An assessment of 35 commercial instruments 1967 P. M. G. BROUGHTON, A. H. GOWENLOCK, G. M. WIDDOWSON, and K. A. AHLQUIST 17s (\$2)

4 An Evaluation of 5 Commercial Flame Photometers suitable for the Simultaneous Determination of Sodium and Potassium March 1970 P. M. G. BROUGHTON and J. B. DAWSON 17s (\$2)

TECHNICAL BULLETINS

9 Determination of Urea by Auto-Analyzer November 1966 RUTH M. HASLAM 8s 6d (\$1)

10 Filter Fluorimeters. A comparative list of 14 instruments March 1967 HANNELORE BRAUNSBURG (Re-issued in response to demand. Text still valuable, list now out of date) 8s 6d (\$1)

11 Determination of Serum Albumin by AutoAnalyzer using Bromocresol Green October 1967 B. E. NORTHAM and G. M. WIDDOWSON 8s 6d (\$1)

13 An Assessment of the Technicon Type II Sampler Unit March 1968 B. C. GRAY and G. K. MCGOWAN 8s 6d (\$1)

14 Atomic Absorption Spectroscopy. An outline of its principles and a guide to the selection of instruments May 1968 J. B. DAWSON and P. M. G. BROUGHTON 8s 6d (\$1)

15 A Guide to Automatic Pipettes (2nd edition) June 1968 P. M. G. BROUGHTON 8s 6d (\$1)

16 A Guide to Automation in Clinical Chemistry May 1969 P. M. G. BROUGHTON 12s 6d (\$1.50)

17 Flame Photometers (2nd edition) 1969 P. WILDING 12s 6d (\$1.50)

18 Control Solutions for Clinical Biochemistry (4th edition) March 1970 P. M. G. BROUGHTON 12s 6d (\$1.50)

19 Spectrophotometers. A comparative list of low-priced instruments readily available in Britain May 1970 C. E. WILDE and P. SEWELL 12s 6d (\$1.50)

20 Quantities and Units in Clinical Biochemistry June 1970 P. M. G. BROUGHTON 12s 6d (\$1.50)
More than 30 copies in units of 10 at 4s

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The July 1970 Issue

THE JULY 1970 ISSUE CONTAINS THE FOLLOWING PAPERS

Megaloblastic anaemia of pregnancy: A clinical and laboratory study with particular reference to the total and labile serum folate levels

P. G. RAE AND P. M. ROBB

A haematological study of patients receiving long-term treatment with trimethoprim and sulphonomide

G. C. JENKINS, D. T. D. HUGHES, AND P. C. HALL

Red cell survival in biliary cirrhosis R. HUME, J. M. WILLIAMSON, AND J. W. WHITELAW

Relationships between platelet function tests in normal and uraemic subjects A. A. HASSANEIN, G. P. MCNICOL, AND A. S. DOUGLAS

The irrelevance of adhesive platelet estimations after thrombosis R. D. EASTHAM

The application of tetrazolium bioautography to the identification of folic acid derivatives R. J. LEEMING, HEATHER PORTMAN-GRAHAM, C. H. J. SWAN, AND J. A. BLAIR

A composite malignant tumour of the elderly female breast D. M. WAYTE, J. B. STEWART, AND C. G. MCKENZIE

Sensitivity of *Nocardia* to trimethoprim and sulphonamides *in vitro* WILLIAM A. BLACK

Tetracycline levels in bronchial secretions M. J. CAMPBELL

Barbiturate blood levels found at necropsy in proven cases of acute barbiturate poisoning ROGER GILLET AND FRANK G. WARBURTON

An assessment of an automated fluorimetric blood phenylalanine technique for phenylketonuria screening and for accurate estimations J. B. HOLTON AND P. M. WEST

Noise levels in a clinical chemistry laboratory P. D. GRIFFITHS, R. L. KELL, AND W. TAYLOR

Technical methods
Flexible electrophoresis applicator for use with the AutoAnalyzer in routine protein analysis M. E. CARRUTHERS

A simple high-speed recording colorimeter system G. B. TENNANT AND J. L. WITHEY

Obituary/Professor Nuala Crowley

Letter to the Editor

Book reviews

Copies are still available and may be obtained from the PUBLISHING MANAGER,

BRITISH MEDICAL ASSOCIATION, TAVISTOCK SQUARE, WC1H 9JR price 22/6.

Resistance to Ampicillin

We have read with interest the paper by Slocombe and Sutherland (*J. clin. Path.*, 1969, 22, 649) who report results which 'show no evidence of increased resistance to ampicillin among Gram-negative bacilli after six years' clinical usage'. The cultures examined by them were unselected fresh clinical isolates from four hospital laboratories in the London area.

Ampicillin has been extensively used in this hospital since 1960 and, since then, all strains of *Enterobacteriaceae* isolated from urines, pus, and sputum have been immediately tested for sensitivity to ampicillin by methods similar to those reported earlier (Holt and Stewart). Since 1964 the final inoculum concentration has been standardized at between 0.5 and 1×10^8 orgs. per ml. Some faecal strains were similarly tested.

The results of this survey are as follows:

Year	No. of Strains with MIC (> 100 µg/ml ampicillin > 500 µg/ml benzylpenicillin)		
	<i>Escherichia</i>	<i>Klebsiella</i>	<i>Proteus spp.</i>
1961	62/167 (37%)	14/17	20/92 (22%)
1962	87/259 (33%)	40/51 (78%)	83/208 (40%)
1963	70/188 (37%)	44/57 (77%)	64/155 (41%)
1964	90/242 (37%)	48/66 (73%)	68/191 (36%)
1965	116/304 (38%)	68/101 (67%)	94/293 (32%)
1966	161/241 (67%)	39/60 (65%)	45/99 (45%)
1967	130/201 (65%)	52/63 (82%)	68/135 (50%)
1968	141/221 (64%)	56/72 (77%)	69/140 (49%)

Resistance of Enterobacteriaceae to ampicillin and benzylpenicillin over period 1961-1968

It will be seen that the percentage of *Escherichia* and *Proteus* strains resistant to ampicillin has approximately doubled during the eight years from 1961. The proportion of resistant *Klebsiella* strains shows little change over this period.

Davis, Lilly, and Lowbury report in the same volume of *J. clin. Path.* (page 634) that a very high proportion of *E. coli* (93.7%) and of *Proteus mirabilis* (95%) recovered by them from burns was resistant to ampicillin.

We have, however, no doubt of the value of ampicillin in the treatment of many severe infections, especially those caused by capsulated haemophili and faecal streptococci; for these purposes we regard it as the drug of choice. There

appears to be no evidence of emerging resistance of these organisms to ampicillin.

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Reference

Holt, R. J., and Stewart, G. T. (1964). Production of amidase and β -lactamase by bacteria. *J. gen. Microbiol.*, 36, 203.

False-positive Reactions to Syphilis Tests

In the February 1970 issue of the *Journal of Clinical Pathology*, in the article 'The biological false positive reaction to serological tests for syphilis', by M. F. Garner, is the statement: 'biological false positive reactions in blood donors are of interest,

Urgent Notice

ACP BROADSHEET 68 DATED APRIL 1970

Please *destroy* all copies of this Broadsheet which contain errors. Correct copies will be sent to all those who have placed standing orders for Broad-sheets, and to all ACP members automatically without further charge. A notice will appear in the *Journal of Clinical Pathology* informing other subscribers and buyers when the reprinted Broadsheet is available.

Chemical Pathology in Relation to Clinical Medicine

The next symposium organized by the Chemical Pathology Committee of the Association of Clinical Pathologists in the series on chemical pathology in relation to clinical medicine will be on 'Enzyme assays in medicine'. It is to be held at the Royal Society of Medicine, London, on Monday 23 and Tuesday 24 November 1970 under the Chairmanship of Professor D. N. Baron.

Overseas Tutor Scheme in Medical Laboratory Technology

This year will see the first of a new series of courses for the training of senior laboratory technologists from overseas as tutors at the Royal Free Hospital, London.

The aim of this scheme is to give a six months' course of training to experienced, qualified technicians, in order to 'teach them to teach' medical laboratory technology. It is felt that if experienced overseas technicians were trained as tutors, they could either form the nucleus of new training centres or add to those already in existence. It should be understood that the aim is not to produce a 'super technician', or to give necessarily an extra qualification, but rather to train in this subject. Eighteen experienced technicians will not have had less than (about) five years' experience following qualification and the latter will be the qualification awarded locally or its oversea equivalent. Technicians will not be close to retiring age, and will not necessarily be the chief technician of the service or the centre. The trainees on this pioneer course are mainly supported financially by the Ministry of Overseas Development who also are meeting the capital and recurrent costs.

since to my knowledge they have not been previously reported.' This phenomenon has been reported in the medical literature on many occasions and a few references are:

Moore, J. E., and Mohr, C. F. (1952). Biologically false positive serologic tests for syphilis. *J. Amer. med. Ass.*, 150, 467.

Putkonen, T. (1965). Biologic false positive seroreaction for syphilis. *Acta derm.-venereol. (Stockh.)*, 45, 148-155.

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