Letters to the Editor

The author has commented as follows:
Cavill et al. have produced data which agree with the estimate of McSwiney and Woodrow (1969)—'... approximately 3% of everything that one does is a mistake even with very careful organization'. But is the conclusion of Cavill and his colleagues—stop telephoning results on request—the correct way to reduce this error? I do not believe so, and I find it hard to understand how a white cell count of 'three point six', to take one of their examples, could be read back as 'three eight point zero' or 'thirty eight', Welsh accents notwithstanding. McSwiney and Woodrow (1969) stressed the need to double check, and I would suggest that the double checking drill used in Cardiff needs to be re-examined. I (Henderson, 1977) previously suggested that the name of the person taking the laboratory result should be recorded, as the efficiency of the process increases when accountability rears its head!

The fact that Cavill et al. are asked to telephone so many results suggests that their routine means of communication with the wards is basically unsatisfactory. I (Henderson, 1979) bemoaned the fact that we, at University Hospital, were not asked often enough to telephone non-priority results when they were ready, but this maybe is because we issue computer-compiled interim laboratory reports up to five times during the day from 0700 until 2200.

Of course we are all asked, unreasonably, to provide results quickly, but if even a small proportion of these results are really needed for good patient care I believe that we have to grin and bear the consequences. Until we all get equipped with visual display terminals on every ward connected with the laboratory computer, telephoning is still the most convenient method of transferring data rapidly and easily, if not always exactly.

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References

Book reviews


Understanding the initiation of thrombosis and possibly atheroma seems likely to come from a study of platelets and their interactions with vascular endothelium. Of the 11 essays in this collection, five are about platelet physiology, one about platelets and the proliferative response of the injured artery, modern jargon for atheroma; others consider transport across arterial endothelium, fibrin (-ogen) breakdown products, prothrombin biochemistry, contact factor interrelationships, and the clinical management of dyspeptic bleeding.

Many of the essays are very specialised and none is easy to read. An absence of critical comment and a welter of documented details (on average 185 references per chapter) will swamp the general reader. Nevertheless, L. A. Harker provides a useful chapter on platelet survival time measurements, summarising many previous reviews. Those with stamina should read J. M. Gerrard and J. G. White's discussion of how the balance between prostaglandins, ADP, and cyclic AMP modulates calcium flux in the thrombocyte and how microstructure and function interrelate. But the most important chapter must be R. J. Friedman and E. R. Burn's discussion of atheroma as a neo-intimal proliferation of smooth muscle cells which have migrated from the arterial media. Such migration and proliferation is associated with endothelial damage, possibly under the control of a mitogen released from platelets that adhere and aggregate at the site of injury. Such an hypothesis provides ample scope for clinical and pathological investigation and seems a true advance in current medical thought. But why must those who use sterling rather than dollars pay so much for the privilege of reading it?

P. J. HAMILTON


This book forms the published proceedings of a symposium held in October 1976 in
Bochum and claims to have 'no precedent on the market'. Certainly, it would be difficult to name another single current volume, of manageable size, that attempts to deal with the complement system and its relevance to disease. The book is aimed, so say the publishers, at hospital physicians and clinical pathologists; and, as is so often the case with symposium proceedings, it will satisfy neither fully. The clinician will be deterred by the first two sections on methods and method standardisation—largely because many clinicians are either bored or bemused by graphs of haemolytic assays and blurred photographs of immunoelectrophoresis. If they take the self-indulgent step of omitting the first 60 pages, they will then come face-to-face with five succeeding sections which deal with the complement components in a wide selection of disease states. Diagnosis and prognosis using complement assays are dealt with in relation to the haematopoietic system, the respiratory system (newborn respiratory distress syndrome), CMV infections, the autoimmune disorders, liver disease, and neurological disorders. The quality of papers is very variable: there are some thoughtful reviews of the current state of ignorance, for example, by Petz, who discusses the problems of choosing Coombs' reagent, and by Snyderman and McCarty, who give a systematised account of the usefulness (or otherwise) of complement assays, particularly in relation to SLE.

The book also includes a series of six papers, grouped as 'Pathophysiology', which deal largely with experimental data on the function of complement in vitro, with some extrapolations to its in vivo behaviour. There are four papers dealing with complement and action by drugs, which include three interesting studies on the effects of radiographic contrast media; these help to explain some of the rather frightening adverse reactions that have been encountered since the introduction of the soluble derivatives of tribenzoic acid (for example, methylglucamine diazirato). The adverse effect of these compounds when given in relatively high dosage is mainly produced through the alternate pathway, either by direct activation or by activation of proteolytic enzymes which, in turn, cleave complement proteins. Antibody is not involved, and there may well be associated activity within the coagulation cascade and fibrinolytic systems.

The genetic aspects of the complement system are dealt with in the final series of presented papers. Despite the relative rarity of genetically determined deficiencies of complement components, these are proving a fruitful source of material for the study of the biological role of complement proteins in the intact animal, rather as the inborn errors of metabolism help to clarify the enzymatic pathways for the biochemists. The clinicians may be happy to see the 'complementologists' weaned away from their obsessive preoccupation with sheep red cells, and will eventually gain insight into some hitherto unexplained disorders of defective bacterial handling and auto-immune disorders.

Like many collections of symposia proceedings, this book resembles the legendary 'curate's egg—it's very good in parts. But, unlike the unhappy curate, anxious to please his host, the bishop, I would perhaps point out—it's bad in parts. To attract the clinical reader, one would have to remove the detailed technical papers; to interest the laboratory worker one needs rather more than a few enthusiastic exponents of C₃ assays to expound the merits and demerits of the assay systems. However, it is encouraging to see an attempted marriage of clinician and laboratory worker, particularly over the anvil of complement, which has for so long been a puzzle to the one and an esoteric discipline to the other. Some of the discussion sections are perhaps the most enlightening parts of the book because they often reveal the great gaps that still exist, both in understanding how complement works and its relationship to normal and disease states. With all its defects, this book marks an interesting stage in the natural history of complement and human tissues, and it should attract the immunologist practising in the medical environment—even if only for future comparison with what may be published in 10 years' time.

HEATHER M. DICK


The introduction of immunological tests for thyroid autoantibodies and of radioimmunoassays for the measurement of the hormones of the pituitary thyroid system has resulted in a resurgence of interest in diseases of the thyroid. The two editors of this volume, who have themselves contributed greatly to the new knowledge, have enlisted a distinguished group of authors to assist them in producing a companion to an earlier volume in this series which was devoted to hyperthyroidism.

This is a rich collection of reviews with something of interest to everyone. There are chapters on congenital hypothyroidism, endemic goitre and cretinism, and dyschoromogenetic goitre; there are others on the aetiology, epidemiology, immunology, and investigation of hypothyroidism; and still more on goitrogenes, non-toxic goitre, thyroid nodules, tumours, and cancer. Each chapter is clearly and concisely written and contains a multitude of references, including many from 1978. This compact book is highly recommended.

R. L. HIMSWORTH


This is the last of three volumes concerned with infections of the nervous system in a series of 36 volumes on clinical neurology. This volume has 27 chapters written by 34 authors drawn almost equally from North America, South America, and Europe, although one is South African.

There are chapters on infections by protozoa, helminths, and mycotic agents, and these cover actinomycosis, amoeba infections, angiostrongylus cantonensis, ascariosis, aspergillosis, candidiosis, cocciidioidomycosis, cryptococcosis, coccidiodomycosis, echinococcosis, filariasis, helminthiasis, histoplasmosis, malaria, a review of mycosis, North American blastomycosis, nocardiosis, paracoccidioidomycosis, paragonimiasis, phycocyanosis (mucormycosis), schistosomiasis, toxoplasmosis, trichinosis, and trypanosomiasis. A final chapter refers to a series of rather uncommon fungal diseases and includes references often to single case reports of alelescheria boydi, alternariasis, cephalosporium, cladosporiosis, diplonhinitrichosis, drechsleraisis, fonsecaeasis, madurellosis, paecilomycosis, penicilliosis, sporotrichosis, streptomycosis, torulopsis,
Clinical Aspects of the Complement System

Heather M. Dick

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