The prodigious growth of articles, Congress volumes and publications in general concerning aplastic anaemia has been recently emphasized in the ISH Divisional Meeting of Barcelona by Heim-pel. This is yet an additional contribution, which has many merits for ‘myelophrenics’, as discussed in a scholarly and witty introduction by D. G. Nathan, but is also a timely and comprehensive review both of the state of the art and of possible future developments in severe aplastic anaemia.

An effort has been made by the Editors, who had also organized the meeting at Airlie House, Virginia, USA, June 26-28 1983, to integrate biological advances with clinical studies. It is hard to say whether this goal was achieved; the discussions on stem cell biology, written by authorities the likes of Ogawa, Messner, McCulloch and others, make fascinating reading but do not always bridge the gap between the patient and his in vitro failing colonies; while those on haemopoietic growth factors, though most instructive when dealing with haemopoiesis in general, do not really seem to furnish new leads for the treatment of the aplastic patient.

To be sure, the demonstration that a human parvo virus (HPV) is capable of inducing temporary erythroid hypoplasia in rapidly cycling erythroid marrows has been an interesting acquisition, and the demonstration of HPV in the nuclei or erythroid progenitors by Young et al. is a brilliant piece of investigational work. There is, however, at least to my mind, an unsurpassable hiatus between the elucidation of the pathogenesis of what I should like to call Ow-ren’s crises, without confining them to hereditary spherocytosis, and true aplastic anaemia, which is after all a misnomer, since it is a trilineage disease with multipotential stem cells as targets. One cannot help theorizing that the elucidation of the relationship, let us say, between the putative virus that causes non-A non-B hepatitis and a self-perpetuating autoimmune mechanism might be more rewarding. Even so, this would concern only a small minority of cases, and what about ‘idiopathic’ aplastic anaemia, which makes up the great majority?

Perhaps some greater consensus seems to coalesce regarding the significance of ‘suppressor’ lymphocytes in the marrow of these patients. That some subpopulations do release a growth inhibitor, as originally pointed out by Bacigalupo et al., has been confirmed still more recently by Trucco et al. in Nature, but this may also be regarded as a secondary phenomenon acquiring significance in bone marrow failure. Whether ATG/ALG acts by knocking out these lymphocytes, regardless of their being regulatory or immune or whatnot, as suggested by myself, or whether it acts as an ‘immuno-stimulant’, as suggested by Young’s group, is still uncertain. However, one really would like to ask Young et al. just why, in their opinion, ATG/ALG would act in SAA in a way totally different from all the other hyperimmune or
autoimmune conditions in which it has been employed (often in conjunction with other acknowledged immunodepressants such as corticosteroids, antimetabolites, alkylating agents, etc). The fact that ATG/ALG recognizes a host of human antigens in addition to lymphocytes was found out more than a decade ago, and even now some brands will cause direct antiglobulin tests on erythrocytes, and occasionally heteroimmune haemolytic anaemia; but this does not imply that it will spare its principal target, the lymphocytes.

Luckily for the non-initiated (non-myelophrenic) reader some harder conclusions are reached in the clinical sections. ATG/ALG has been definitely shown to be therapeutically active in over 50% of patients with SAA on the basis of carefully controlled clinical studies (Champlin et al.; Camitta et al.), and all clinical investigators feel that very young and young patients should be transplanted, and older ones treated with ATG/ALG. Transplantation has still many drawbacks, but rejection is no longer a problem thanks to better conditioning. Which is the best regimen for patients undergoing transplantation? Radiation had been avoided for a long time because of the non-neoplastic nature of the disease, but it is high time that we dispense with such basically theoretical dogmas in view of the dramatic results obtained with combined modalities (CY-TH, CY-TA) by Ramsay et al. and by Gluckman et al.

I have written quite an extensive review since I am also — as may have been inferred — a myelophrenic. I do believe, however, that this is a good Proceedings volume, and that it makes requested reading for all those who are concerned with aplastic anaemia.

A. Marmont, Genova

R.D. Eastham

Clinical Haematology; 6th ed.


This book, first published in 1961, now appears in the sixth edition. The concept has principally remained unchanged. Most of the chapters have been revised thoroughly and brought up to date. Some chapters have been newly added or completely rewritten, e.g. whole blood viscosity, pyridoxin metabolism, splenic and lymphocyte functions, tests used to differentiate between several forms of leukemia, furthermore leukocyte transfusion and bone marrow transplantation. Particularly comprehensive and worth reading is, as before, the long chapter on blood clotting. The table given at the end of the book comparing the still widely used terms of practice with the SI units is very helpful. With regard to its further completion the size of the book has in the meantime grown to 424 pages.

As in the past Clinical Haematology is a useful manual for the interpretation and evaluation of clinical tests in hematology. Blood parameters are listed according to their respective roles in differential diagnosis. This finally leads to a manifold screen which enables the physician to classify a concrete disease. Nosology is not included and therapeutic measurements are restricted to only a few examples comprising the application of anticoagulants, plasmapheresis and so on. The crucial problems in hematology at present, namely the treatment of leukemia as well as the classification of lymphoma, are not taken into account. Thus far the title of the book could be misleading to an uninformed prospective reader. But being aware of this point, the book can be recommended to all physicians interested in hematology. It is in any case useful to an experi
The guest editors of this volume on platelet disorders have succeeded in assembling a number of authorities covering all aspects of platelet physiology and pathophysiology, including some related topics, such as von Willebrand’s disease, myeloproliferative disorders and bone marrow transplantation in aplastic anemia. To make it clear from the beginning: this is not a book for beginners but rather a review for hematologists who wish to be brought up-to-date on recent findings. In this respect, the review on ‘normal mechanisms of platelet functions’ by Vermylen and co-workers from Leuven is an outstanding example of authoritative, yet extremely lucid, writing. Other chapters are on a much lower level. I find it inadmissible that authors simply refer to their own work when citing key references. Another questionable approach is that of overlooking pioneering research and limiting quotations to the past few years. Unfortunately, the responsible editors made no attempt to correct such basic omissions nor did they try to reconcile the many conflicting statements. Thus, on ‘learns’ on page 25 that in May-Hegglin anomaly ‘most patients have no spontaneous symptoms from this defect, although their bleeding time is so long that their risk for surgical procedure is increased sufficiently to warrant platelet transfusion’ (no references given; F.H. Gardner, J.D. Bessman). On page 167, R.M. Hardisty states that ‘despite the morphological abnormality of the platelets, no convincing abnormality of platelet function has been reported’. To transfuse or not to transfuse, that is the question. Both authors overlooked the possibility of heterogeneity of a seemingly well-defined disorder. The same -nota bene – holds true in consideration of the hemolytic-uremic syndrome, myeloproliferative disorders, etc. To buy or not to buy the book? I did buy several copies for my laboratory and let my co-workers believe or not believe its content.

E.A. Beck, Bern


This is a highly technical book summarizing the efforts to bring some order into methods used for controlling anticoagulation with vitamin K antagonists. With just this intention the leading experts in this field met in July 1983, in Leiden. Their prepared lectures and discussion remarks have been carefully reproduced. Not all of the details will be relevant a few years from now in view of rapid developments of both the tests and their biochemical interpretation. Yet, the editors are to be congratulated for their relentless efforts of which this monograph bears testimony. I recommend this book to those who are dealing with any of the cumbersome aspects of oral anticoagulation, whereas the general hematologist may find the essential information in less detailed recent reviews.

E.A. Beck, Bern

S. Roath
‘Topical Reviews in Haematology’ features review articles ‘in areas where enough information had been gained to make this possible’ (quoted from the Preface). In the present volume, a review of benzene-induced disturbances of blood formation by M. Aksoy and a critical article by J.P. Hester and R.M. Kellogg on clinical applications of continuous flow centrifugation belong to this group. Secondly, the book covers ‘other areas where an information plateau had not been reached but where there was sufficient data for somewhat more provocative analysis of the current position.’ Within this second category, one discovers two technical reports on plastic embedding of bone marrow biopsy specimens (G. Rowden, R.A. Sacher and N.S. More) and on chromogenic peptide substrates for coagulation factor assays (M.F. Scully and V. V. Kakkar), both well illustrated and including all necessary background information. There are four biologically oriented reviews on eosinophil leucocytes (G. Hudson and M.H. Maxwell), inhibitory regulators of neutrophil chemotaxis (U. Jayaswal), platelets and prostaglandins (F.E. Preston) and a well-balanced account by P.A. Bolhuis and J.J. Sixma on the factor VIII/von Willebrand factor. I have to apologize for my slow reporting on this valuable book which, two years after its appearance, has lost nothing of its value as a concise and well-formulated source of information in specific research areas.

E.A. Beck, Bern

P. Fondu, O. Thijs

Haemostatic Failure in Liver Disease
Nijhoff, The Hague 1984
IX+184 pp.; Dfl. 90.-/USS 34.50

This book contains fourteen lectures presented at an international symposium on ‘Haemostatic Failure in Liver Disease’ held in Brussels, Belgium, in March 1983. Specialists in both blood coagulation and gastroenterology describe aspects of the hemostatic phenomena in acute and chronic liver disease. Some present original data, others review the topic. The spectrum of problems encountered with bleeding as a consequence of liver diseases is outlined in a loose sequence. Clinical manifestations of the hemostatic failure as well as the roles of particular components in hemostasis, such as platelets, protein C and fibrinogen, are discussed. A significant part of the book is devoted to therapeutic measures in bleeding episodes. The remaining papers include essays on the diagnostic problems in hemostasis, the influence of oral anticoagulants on the nonhepatic carboxylase, coagulation defects following peritoneovenous shunts and bleeding during orthotopic liver transplantation. All papers are accompanied by references to original articles and by transcripts of the open discussions held after each presentation. The volume has been speedily edited, a fact which might explain the frequency of typing and spelling errors. Nevertheless, the book is a valuable source of updated information, particularly of interest to clinicians and laboratory-oriented physicians who are confronted with bleedings in patients with liver diseases.

B.A. Perret, Bern

128

Book Reviews
H. Harris, K. Hirschhorn Advances in Human Genetics, vol. 13
The 13th volume of ‘Advances in Human Genetics’ gives an outstanding and competent review covering the following topics: the genetics of blood coagulation; marker-(X)-linked mental retardation; human antibody genes: evolutionary and molecular genetic perspectives; mutations affecting trace elements in humans and animals; phenylketonuria and its variants. Each chapter is an authoritative and up-to-date review and contains most valuable information about its specific subject. With the recent rapid expansion of research in many areas of human genetics and with its flood of publications covering a wide spectrum of disciplines it is almost impossible to follow all the important discoveries. Therefore a book like the present volume is a most welcome help in providing easy access to new observations. The extensive references are most useful in retrieving the original literature to each topic. This book can be highly recommended to all medical geneticists, physicians interested in this discipline, but also to biologists and biochemists interested in the clinical aspects of their special research areas.
Suzanne Braga, Bern

Theodor Friedmann
Gene Therapy
Fact and Fiction
Biology’s New Approaches to Disease
Cold Spring Harbor Laboratories, New York 1984
XXI+132 pp.; US$4.95
Gene technology and gene manipulation have become a favorite topic in newspaper editorials and magazine stories. Besides some real information they always contain to some extent incorrect interpretations and erroneous speculations. Research in molecular genetics has thus captured public imagination and emotions.
With the present booklet Theodor Friedmann, a pediatrician and molecular biologist at the University of California at San Diego, provides an easily comprehensible overview of the work of molecular biologists, although some basic knowledge in this field is assumed. The publication is based on the 1982 Branbury Conference, Cold Spring Harbor, on Gene Therapy – Fact and Fiction. It draws mainly on the conference contributions of its participants which are well-known scientists and physicians with a major interest in genetics. Their contributions are sometimes paraphrased but mostly taken down in their own words in transcript directly from the meeting, which makes the book very lively and gives it a personal style.
Dr. Friedmann did excellent work in transforming a scientific meeting into an account suitable not only for physicians but also for a lay audience, while maintaining the scientific integrity and substance of conference exchanges. The present book is thus meant to be assessment of what gene therapy might accomplish, where the field currently stands and where it is likely to be in the near future. Only in the final chapter does the author depart from the Branbury proceedings and expresses his personal feelings regarding the ethics of gene manipulation. The booklet can be highly recommended to all people concerned with the latest developments in gene technology, who require objective information in this expanding field of science.
Suzanne Braga, Bern
‘Factor VIII Inhibitors’ contains the invited lectures, the recorded discussions and summaries of poster sessions of a meeting held in November 1983 in Farmington, Conn. The volume features a number of carefully written overviews on immunological aspects and the natural history of inhibitors to factor VIII coagulant. Beyond this limited topic, the book also contains accounts on inhibitors of the factor VIII/von Willebrand factor and those directed against factor IX. Established and experimental ways of treating patients with inhibitors, particularly against factor VIII, are described in another main part of the book. Despite its rapid appearance the book has been carefully edited. While some of the information contained in this volume is repetitive to those following the original literature the book is yet an excellent and up-to-date source of information to both physicians taking care of hemophiliacs and biochemists interested in this particular topic.

E.A. Beck, Bern

Bertha Frisch and Rainer Bart
Bone Marrow Biopsies Updated
Bibliotheca Haematologica, vol. 50
Karger Basel 1984
VIII + 132 pp.; SFr. 98.-/DM 117.-/US$ 58.75
ISBN 3-8055-3863-4

This volume of a series of hematological monographs contains lectures given at a satellite symposium held at the occasion of the 7th Congress of the European and African Division of the International Society of Hematology in Barcelona in September 1983. It deals with methods and selected applications of bone marrow biopsy in hematology. Particularly, the techniques of methylacrylate embedding and cryostat sections are reviewed, using the vast experience of R. Burkhard in Munich and B. Frisch in Tel Aviv. 4 chapters are devoted to myeloproliferative disorders. Even though the authors of these chapters could not agree on a common nomenclature, the relevance of delicate histology for classification and evolution of chronic myeloproliferative diseases is well documented. Additional 3 chapters consider phenotypes of lymphoproliferative diseases in the bone marrow.

Quality of printing, especially of the black-and-white micro-photographs is excellent and justifies the relatively high price of the small volume. It is recommended to investigators using bone marrow biopsy in diagnostic routine and clinical research.

H. Heimpel, Ulm