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BOOK REVIEWS

THE RED CELL. Production, Metabolism, Destruction: Normal and Abnormal. John W. Harris. 482 pp. Illust. Harvard University Press, Cambridge, Mass.; S. J. Reginald Saunders and Company Limited, Toronto, 1963. $6.35 paperbound.

This fine book represents a magnificent attempt to summarize all that is presently known about the structure, production, metabolism and destruction of human red cells.

The author, Dr. J. W. Harris, is Professor of Medicine at Western Reserve University. His book has 358 pages of text, followed by 108 pages of references. References are divided into sections, one section for each chapter; thus they do not clutter the text and are easily found when required. After the reference section, there is a 22-page index. The whole book is paperbound to reduce cost.

The text is subdivided into 11 chapters as follows: Heme synthesis, the porphyrias and porphyrinuria, Iron metabolism and iron-lack anemia, Globin biosynthesis and sickle cell disease, Effects of anemia, Classification of anemias, Normal red cell production, Pernicious anemia and the non-addisonian megaloblastic anemias, Red cell metabolism and methemoglobinemia, Red cell destruction and the hemolytic disorders, Polycythemia, and Anemias of bone marrow failure.

This book is a "must" for all hematologists and students of hematology. Internists and neurologists will find much to interest them in the sections on porphyria and subacute combined degeneration of the spinal cord. All those with an interest in biochemistry or genetics will be fascinated by the huge new knowledge concerning the structure of normal and abnormal hemoglobins. The relationship of the defect in sickle cell hemoglobin to the production of symptoms is discussed in great detail. The chapter on iron metabolism should interest most internists.

The subject matter accents the basic science of red cell hematology; the physics, physiology and biochemistry of the red cell in health and disease are fully dealt with, while signs, symptoms and treatment are mentioned only where absolutely pertinent.

The introduction by Thomas Hale Ham is recommendation enough to put this book in every university library and on every hematologist's bookshelf. Those who gasp at the wealth of detail should consider that this book is used by second-year medical students in their course on hematology, and be thankful that they have presumably long since graduated.

GYNAECOLOGICAL PATHOLOGY. Magnus Haines and Claud W. Taylor. 519 pp. Illust. J. & A. Churchill Ltd., London; British Book Service (Canada) Ltd., Toronto, 1962. $18.35.

This new British textbook on gynecological pathology is an excellent one. The subject matter is well organized, clearly presented and very complete. The photomicrographs are beautifully reproduced, the selection is excellent, and the free use of high-power magnification further enhances their value. Photographs of gross specimens are equally well chosen and reproduced.

The book is divided into 17 chapters, each devoted to separate genital organs. Exception to this arrangement is made in the discussion of genital tuberculosis, disorders of the lymphoreticular system, endometriosis and diseases of the chorion, all of which may affect the entire genital tract. The excellence of the chapter on genital tuberculosis reflects the author's long interest in tuberculosis of the female genitalia. The chapter on disorders of the lymphoreticular system discusses the possible involvement of the genital tract by lymphosarcoma, Hodgkin's disease, leukemia, myelomatosis and eosinophilic granuloma. The chapter on diseases of the vulva, particularly in regard to leukoplakia and vulvar dermatoses, clears away much confusion. Sweat gland tumours, carcinoma, rodent ulcer, intradermal carcinoma and Paget's disease are beautifully illustrated and described. The chapter on carcinoma of the cervix includes an excellent discussion of carcinoma *in situ*, both in regard to criteria for diagnosis as well as its relationship to invasive carcinoma. A portion of this chapter is devoted to a discussion of the irradiation changes in uterine carcinoma. Glücksman's work on the histological assessment of radiation response is reviewed and augmented by superb photomicrographs. The chapter on ovarian tumours is most complete. A classification is used which does much to clarify and simplify this aspect of ovarian pathology. Metastatic ovarian carcinoma is completely discussed. The excellence of the photomicrographs is particularly evident in the part of this chapter devoted to the discussion of the "special" ovarian tumours.

Bibliographies at the end of each chapter are up to date, very complete, and include a wide selection from both English and foreign sources. The title of each reference is given, which is most helpful and time-saving to the reader. Exfoliative gynecology is not discussed, but this in no way detracts from the excellence of the book. This textbook will prove invaluable for those in clinical gynecological practice and to postgraduate students and pathologists.

EXTERNAL INFECTIONS OF THE EYE. Bacterial, Viral, and Mycotic. Helena Biantovskaya Fedukowicz. 228 pp. Illust. Appleton-Century-Crofts, Inc., New York, 1963. $16.50 (U.S. funds).

The practising ophthalmologist and residents in ophthalmology will find this an integrated textbook of external diseases and microbiology of the eye. A modern English treatise on ocular infections that included descriptions of laboratory diagnosis and treatment previously did not exist. To the student of ophthalmology this textbook fills a pressing need.

The book deals with the infectious diseases of the external ocular structures and for the first time presents a unified discussion of ophthalmic microbiology, virology, mycology and cytology. The presentation is enhanced by numerous photographs, paintings and drawings. Basic approaches are emphasized and latest research developments are incorporated. The result is a clearly presented practical book that the busy practitioner can turn to repeatedly, and it is a "must" for the resident in ophthalmology.

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MEDICAL DEPARTMENT, UNITED STATES ARMY. INTERNAL MEDICINE IN WORLD WAR II. VOL. II: INFECTIOUS DISEASES. Edited by W. Paul Havens, Jr. 649 pp. Illust. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 1963. $6.75 (U.S. funds).

This volume, the twenty-first to be published in a series dealing with the history of the U.S. Army Medical Department in World War II, is the second volume to be published in the internal medicine group. It is concerned with the clinical descriptions of certain communicable diseases, some of them entirely new, others of limited experience, and others commonly encountered in previous wars seen under a variety of circumstances in many different parts of the world. The 19 authors were selected not only for their eminence in the particular subject but all had wartime experiences dealing with these diseases.

It is a tremendously valuable clinical account which will serve as a stimulating experience to all those interested in the communicable diseases. The changing concepts of certain diseases and their management are well documented. For instance, the management of venereal disease underwent a complete change from a complicated regimen requiring hospitalization to treatment in field units, all because of the introduction of penicillin and the foresight to take it into use at a very early stage in its development.

Cutaneous diphtheria, a disease rarely seen in peacetime, became a serious problem, particularly in the tropics, and is dealt with in some detail.

While the text is based on an enormous clinical military experience and is of great value as a reference for members of the medical service of the armed forces, it is also valuable for medical students, general practitioners and specialists.

TEXTBOOK OF MICROBIOLOGY. 18th ed. William Burrows. 1154 pp. Illust. W. B. Saunders Company, Philadelphia and London; McAinsh and Company Limited, Toronto, 1963. $18.40.

Fifty-five years have passed since Professor Edwin O. Jordan of the University of Chicago published the first edition of his "Textbook of Bacteriology". It is a tribute to him and Professor William Burrows that its growth has parallelled that of its subject. The new eighteenth edition, which again includes the subjects of bacteriology, mycology, parasitology and virology, has been written largely by Professor Burrows, but bacterial metabolism has been handled by J. W. Moulder, and parasitology by R. M. Lewert.

The book begins with a historical survey in which the development of ideas is stressed and this is not obscured by too many names. This is followed by a substantial and surprisingly complete and compact chapter on laboratory methods. The serological methods described at this stage would, however, be unintelligible to a beginner but it is probably wise to include them here for reference. The chapters on the physical and chemical structure of micro-organisms and on growth and metabolism combine the material on bacteria and viruses, a change made in the 1954 edition, and emphasize the nucleic acid basis for both types of organisms. Some of the photographs unfortunately omit magnification and the sources are not always given, but they are very well chosen. The cell wall characteristics of Gram-positive and Gram-negative bacteria have been transposed in the table on page 63.

The chapters on microbial variation and genetics and the epidemiology of infectious disease are particularly well done.

The presentation of immunity in an introductory text is very difficult. It is divided here into three chapters, one on antigens, antibodies and their interactions, one on serological reactions, and one on the immune state. The presentation is steady if not dramatic. The material on delayed-type hypersensitivity is much too limited. The terminology for Rh antigens should be CDEcde, not Rh_0 etc. Passive cutaneous anaphylaxis is very inadequately (if not wrongly—it is so brief that it is difficult to tell) described. The Salmonella antigen terminology needs updating — Roman numerals are no longer used for somatic antigens. Criticisms of such individual points are apt to give an impression of inadequacy. This would be decidedly a wrong impression, for the 83-page treatment of immunity is in general quite satisfactory.

The amount of material is admirably suited to undergraduate needs and the ample reference lists included make it relatively easy for the advanced student to use Burrows as a guide to more detailed material.

ATLAS OF VASCULAR SURGERY. Falls B. Hershey and Carl H. Calman. 307 pp. Illust. The C. V. Mosby Co., St. Louis, Mo., 1963. $18.00 (U.S. funds).

This well-illustrated text covers with considerable clarity those lesions which occupy the attention of the vascular surgeon. Milestones in vascular surgery are reviewed in an interesting introductory chapter. The earliest recorded arterial suture is that of the brachial artery by Hallowell in 1759. Lambert had developed the technique and recorded the event in a letter to Dr. Hunter in 1761, in which he stated that it might be possible to cure wounds of arteries, thus avoiding amputations. This prediction has been realized only very recently.

General surgical principles are discussed, special instruments illustrated, and the laws of fluid-flow and their application to vascular surgery reviewed.

A chapter on arteriography is very practical and thorough. Virtually all that is lacking is the patient, inasmuch as details including needle size, film timing, and patient position are included.

Equally thorough chapters follow on abdominal aortic aneurysm, aortoiliac occlusive disease, and the direct surgery of peripheral vascular ischemia.

A stepwise approach to diagnosis, indications, the operation, safeguards, complications and postoperative care is followed throughout the book, which reflects considerable experience. Particularly well illustrated are the numerous details of operations. The importance of attention to detail is impressed on the reader, and this reviewer hopes "Atlas of Vascular Surgery" will find favour among surgical house staff.

Arterial injuries, the surgery of cerebrovascular insufficiency, mesenteric arterial endarterectomy, surgery for portal hypertension, the present status of all forms of sympathectomy, surgery of veins and thrombophlebitis, all are covered clearly. Especially helpful are the illustrations of operative exposures.

This atlas is recommended to all surgeons, but will be especially useful to those practising vascular surgery, and to surgical house staff.