Reviews

Pathology


W.A.D. Anderson and John M. Kissane have co-edited the seventh edition of Pathology. This extensively illustrated two-volume set is organized into forty-eight chapters that have been written by fifty-five contributors, leaders in their fields. Almost half of these individuals are new contributors. The two volumes occupy 3,238 pages, including a thorough index with references reflecting available information in the texts.

The current edition merges pathology with clinical medicine. Some chapters, particularly those written by the new contributors, have had their subject material altered in design of presentation and expanded in scope to reflect current knowledge. The chapters concerning bone, skeletal muscle, and the nervous system have been subdivided to advantage. The one about female genitalia has been rewritten and is quite authoritative.

The diverse authorship of this edition has resulted in texture peaks and valleys, as has been true in previous editions; however, the information overall is well written, and photomicrographs taken by light microscopy are technically excellent.

For three decades this text has been used extensively for classroom presentation of general and systemic pathology and for physician review and reference. Because of its size, Pathology may not be chosen as a basic textbook. Because of its thoroughness and excellence, I believe it will continue to be a standard reference source for medical students, pathologists, and practitioners of all disciplines for decades to come.

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Orthopaedics: Principles and their application


Samuel L. Turek's book Orthopaedics: Principles and their Application is well composed. Sound principles based on the latest documented information in biomechanics, biophysics, and biochemistry are developed and used as stepping stones in building a complete clinical text in the field of the musculoskeletal system. Turek, whose reputation in orthopedics is of the highest caliber, says "This treatise is an attempt to document and correlate all the facts which are currently applicable to the practice of orthopaedic surgery." He adds, "This work is the culmination of an exhaustive survey of the literature and a compilation of information over the past ten years." References listed with each chapter reflect the work of other experts and offer the reader wide experience in the subject.

The text's approach to the subject is conventional. Each chapter is covered in logical sequence with definite clarity. The basic sciences are reviewed in the first part. Developmental, histological, anatomical, and physiological characteristics of the musculoskeletal system are well arranged. Part 2, general orthopedics, includes metabolic, infectious, congenital, and developmental conditions of bone and joints. Emphasis is placed on orthopedic neurology. The section also covers tumors and diseases of muscle and bone and concludes with a chapter on peripheral vascular disease. Regional orthopedics, in part 3, considers all aspects of specific joint disorders in a clinical fashion. Conservative as well as operative forms of treatment are given equal consideration, with less descriptive emphasis on postoperative and rehabilitative management. The orthopedist who is in need of detailed and complete information must supplement this material with more comprehensive texts. The correlation of radioactive isotopes in clinical orthopedics as well as amputation are covered in the final section.

The management of acute traumatic conditions, including treatment of fractures and dislocations (opened and closed), is only covered lightly. If a practitioner is looking to this comprehensive orthopedic text for insight to osteopathic manipulation, he or she only will find the subject touched on lightly in reference to the treatment of discogenic pain in the lower region of the back. Yet, as a guide or reference book for clinical insight to the office management of orthopedic conditions, the physician will be well rewarded. Each clinical disorder is presented in a well-organized fash-

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Clinical endocrinology: A survey of current practice


Clinical Endocrinology is a compact, easy-to-read survey of the current status of diagnosis and treatment of endocrine dysfunction. Emphasis is given to the major problems, those which the physician is likely to encounter in daily practice. The text contains twenty-six chapters, each written by a clinical expert in the area discussed. The chapters have subheadings in bold type, which makes it easy to locate areas of interest. References are at the end of each chapter. Three broad sections compose the text: (1) clinical aspects of metabolic and endocrine homeostasis, (2) diabetes and its complications, and (3) current endocrine diagnosis and therapy.

The first section pertains primarily to endocrine involvement in the control of mobilization and utilization of nutrients and electrolytes, and includes an outstanding chapter on the metabolic effects of insulin by George Cahill. The chapter on pathogenesis and management of obesity contributes much to the understanding of the problem but offers little encouragement for an early breakthrough to easy management of weight.

Diabetes and its complications may be of particular interest to physicians. Juvenile diabetes is described in detail, including important aspects of diagnosis and management of the disease and associated problems. The chapter on insulin therapeutics emphasizes the importance of maintaining blood glucose levels as close to normal as possible to minimize and retard the development of the complications of diabetes. Short, but informative, discussions of hyperglycemic coma and the nephropathic and retinopathic complications of diabetes complete that section.

The use of the oral hypoglycemics in diabetes is evaluated in the final section. Discussions on the endocrine contribution to hypertension, hirsutism, osteoporosis, and renal calculi are included. The remainder of the text is devoted to diagnosis and treatment of gonadal hypofunction and thyroid hyperfunction. (An excellent chapter on tests of thyroid function helps place these diagnostic procedures in perspective.) For most of the disease states presented, the major symptoms and the underlying pathologic mechanisms are described in brief detail, occasionally illustrated by case histories. Where appropriate, dose regimens are given to serve as guidelines for therapy.

Although the treatment of the various endocrine problems is uneven and far from complete, the text should be useful as a quick, readable reference to update and supplement the knowledge of the physician who is not an endocrinologist.

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Natural background radiation in the United States


Various sources and pathways of natural background radiation are described and evaluated in terms of human exposure. Radiation from cosmic sources, radionuclides in the earth, internally deposited radionuclides, inhaled radioactivity, and fallout from nuclear weapons tests is considered.

Much of the basic data for external radiation has been determined by calculating the absorbed dose rate in the air, which then is converted to the absorbed dose rate in tissue (equivalent rate) by using a quality factor of 1 for gamma rays, electrons, and muons; 5 for cosmic-ray neutrons; and 10 for internal alpha emitters. Summary tables of total dose equivalent rates for the lungs, bone (surface and marrow), gonads, and intestinal tract are provided.

Most of the descriptions and tables supply the mean dose to the population. There is detailed information on variability of each of the exposure sources.

Natural Background Radiation in the United States is a very thorough and detailed booklet which would be quite useful as a reference tool.

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Electrocardiographic atlas


When I was asked to review Electrocardiographie Atlas, I had some mixed feelings. As an assistant professor of internal medicine, I see students relying heavily on brief manuals, sometimes to the exclusion of larger texts which give more complete details of an illness or a clinical situation. Therefore, I have come to look on manuals with somewhat of a jaundiced eye. However, Gotzsche’s manual is rather complete, well indexed, and bound in a flexible plastic binder so that it could fit neatly into a lab coat or a physician’s bag. I feel it is designed for the medical student or the house officer who has a good foundation in clinical electrocardiography and needs some small reference to refer to while on rounds.

There is no explanation in the text regarding the derivation of the electrocardiogram (EKG). The vectorial approach to reading EKGs is limited; pattern reading as a method of EKG interpretation is relied on heavily. It is stated in the beginning that the EKGs presented were recorded at 50 mm/sec. and not 25 mm/sec., unless stated. The text was written in Denmark, where apparently the standard paper speed is 50 mm/sec.

An introduction into the interpre-
tation of the EKG reviewing rates, rhythm, and the different components is provided. A glossary follows that covers some basic EKG terms; however, some of them are used mainly in Europe and not found in the standard American text. Examples of EKGs are given, starting with the normal EKG and unipolar lead. There is an excellent section on esophageal leads, which are not usually found even in the standard EKG texts.

The manual then moves on to descriptions of EKG patterns of bundle-branch blocks, hemi-blocks, coronary insufficiency, and so forth. One page is usually given to each pathologic entity, with the exception of myocardial infarction, which covers approximately four pages; however, again, the author does not dwell a great deal on the derivation of the EKG and myocardial infarction but mainly presents patterns for the purpose of trying to document the age of the infarct and the location. Single-page descriptions are devoted to atrial flutter and cor pulmonale. There are examples of EKG changes elicited with certain minerals and medication such as potassium, calcium, and digitals. Finally, several exercises allow the reader to test his knowledge, followed by a discussion of the tracings submitted.

In conclusion, I would say that *Electrocardiographic Atlas* is a good handbook, as long as the reader realizes its limitations.

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Surgical diagnosis


Thorek’s *Surgical Diagnosis* has three major assets: It is very readable, it discusses subjects system by system, and it assumes a very basic approach to diagnosis.

Throughout the book, emphasis is on the importance of clinical examination and physical findings in making a diagnosis. The author’s use of illustrations provides a pictorial review of some basic findings in various pathologic entities. Mnemonic devices serve as valuable teaching aids.

Some shortcomings, in my opinion, surface where Thorek could have deviated, at times, from his generally basic and simplistic approach to provide more detail, thus improving the overall coverage. An example is in the discussion of appendicitis, where he states that “the differential blood count may be more helpful than the total white count” and then fails to discuss how to evaluate the differential blood count. The discussion concerning islet-cell tumors is another example. He says, “The glucose tolerance test is diagnostic if the typical flat low curve is obtained after the patient has been on a carbohydrate diet for a few days before the test”; however, he totally neglects any further discussion of the glucose tolerance curve and its interpretation. Other weak points are the oversimplified discussion of the cranial nerves, inadequate discussion of achalasia and hiatal hernia, fair discussion of Zollinger-Ellison syn-

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Skeletal maturity: The knee joint as a biological indicator

By Alex F. Roche, Howard Wainer, and David Thissen. Pp. 374, with illus. Plenum Publishing Corp., 227 W. 17th St., New York 10011, 1975. $27.50

Skeletal age assessments are needed for the clinical management of children with chromosomal or endocrine abnormalities. They are also important in the guidance and treatment of children with unusual stature. Skeletal Maturity completely reviews, documents, and describes the new Roche-Wainer-Thissen (RWT) method of assessing skeletal maturity.

Roche, Wainer, and Thissen interpret changes in bone development as visualized by radiographs taken of the knee. An excellent presentation is made with regard to the validity of their method. They have compiled a comprehensive review of current and past literature on other methods, and have prepared a well-documented case to bolster their claim to the superiority of the RWT system. I found that the writing style in the first three chapters was cumbersome and resulted in very difficult reading. This was caused by the voluminous amount of references used to develop the authors' thesis.

In subsequent chapters, the maturity indicators that are used in the RWT method are presented. These are femoral, tibial, and fibular indicators. This section is very well done, incorporating diagrams, charts, and linear drawings with sufficient radiographic views to allow the reader the opportunity to become conversant with the indicators.

A plastic, labeled guide is supplied with the text, which is used to measure the femur, tibia, and fibula, as directed. It also can be used to review the radiographs in the text as well as those one might have in the office. It is simple to use, and the directions are clear, concise, and comprehensive.

The translation of measurements into an accurate conclusion on bone maturity requires that a complete compilation of statistical data be available. The authors have developed the data into a computerized program, which is included in an appendix. This program is complete and easily implemented. I believe that the necessity of computer availability will limit the use of this method to the larger medical centers. However, this does not reduce the importance of the work presented by the authors or nullify the RWT method as a comprehensive, accurate, and perhaps better guide to determining skeletal maturity.

Clinicians involved in pediatrics, endocrinology, and radiology will find this text of great interest and should investigate the feasibility of using the RWT method together with or instead of their current procedures.

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Accident and emergency paediatrics


Accident and Emergency Paediatrics is written by Valman, an English paediatrician, and intended to serve as a quick reference for nonpediatricians who treat children in the emergency or operating room. As such, its brevity is an advantage, but because of this brevity, its value is compromised.

The forward by Harold Ellis, M.D., a surgeon, is enlightening because it accurately sums up the attitude of too many of our own specialists, generalists, and students who personally feel that "there is one circumstance
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which still gives me great concern: This is to be called to see a small child in an emergency situation. Everything that goes to make up a doctor's raison d'être is stirred by the sight of a small patient in pain or distress, by the anxiety of the parents, by the obvious concern of the nursing staff, by the difficulties of diagnosis in the infant and by the extra sense of urgency which always accompanies acute illness at this age.

Valman himself comments that "one quarter of the patients (in accident and emergency departments) will be children; few of the medical staff will have received any postgraduate training in pediatrics. I have attempted to present a simplified, even dogmatic approach (to the common emergency problems)."

This book has some excellent summaries on stridor, wheezing, and abdominal pain, but less complete summaries on poisoning, fractures, multiple injuries, rashes, and convulsions. The therapy given is usually the initial therapy only, because the follow-up probably will be left to the pediatrician. Because this book is written by an Englishman, many of the trade name drugs are not familiar to U.S. physicians. However, the writing is interesting and reflects the concern of an experienced clinician.

There is a great need for this type of text. DeSantis and Varga tried to do it in this country in the 1960s, but it evolved into a mini text. Accident and Emergency Paediatrics would be of interest to pediatric and generalist anglophiles; however, in my opinion, it will not be adequate as a reference for use in most of our emergency rooms.

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Modern medicine: A concise textbook for students and practitioners


Modern Medicine: A Concise Textbook for Students and Practitioners is refreshing to read and is written in a way that only the English can write. It is a multiple-author book; therefore, it does not suffer from the handicap that often comes when one or two people attempt to elaborate on subjects that they cannot be totally knowledgeable in.

The profuse number of tables and drawings add much interest.

As its subtitle states, Modern Medicine is a concise textbook and certainly is not an encyclopedic work. I recommend it and am happy to have it in my own library.

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Stroke


"Stroke" is, of course, a general term and includes all types of brain injury that are induced by disorders related to the vascular system. This broadens the subject considerably from the rather narrow and perhaps unexciting concerns relative to thrombotic stroke. Any effective discussion of the topic would have to include a broad overview of risk factors; types of stroke; diagnosis; treatment, both practical and experimental; and presurgical and surgical attempts at therapy.

Stroke represents the proceedings of an international symposium on stroke held in Edinburgh, June 1976. It contains contributions from basic scientists, research clinicians, epidemiologists, and practicing physicians from both the United States and several European countries. It includes general reviews of published activities in each area as well as some original reports of extensive individual studies. Contributors from the United States are well known in the field of stroke and the papers presented are excellent reviews of recent material, most of which have been published subsequently in the American literature.

In most cases, the papers are conversational and easily readable. The statistical material is excellent. The review of the current state of the art in each area, I feel, is quite adequate and generally unbiased.

Discussions of clinical treatment with the inclusion of a large number of useful references are perhaps somewhat general and nondirective in terms of practical application. The physician who wishes to have a compact reference would do well with this volume. It also should be of benefit to the clinician in the evaluation of the many reports of breakthroughs in diagnosis and treatment, because much of the research material that is recorded in this text continues to surface. Stroke does not, however, represent a truly comprehensive review of stroke care. A more detailed publication titled, Fundamentals of Stroke Care, recently released by the U.S. Government Printing Office, is more encyclopedic in nature and would be of more benefit in the day-to-day clinical management of stroke.

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Pressure points: Do-it-yourself acupuncture without needles


This book on "do it yourself" acupuncture is written for the layman. It specifically is aimed at those people who are part of the public movement toward self-help health care. Unfortunately, the information given is misleading and would tend to create higher expectations for the unsophisticated reader than the techniques described are ordinarily capable of producing.

The author's selection of acupuncture points to be used for treatment applied with the fingers is poor in general. When we compound this less than optimal selection of points with the fact that finger pressure is less effective than needle puncture in the treatment of various problems amenable to acupuncture treatment, it is
predictable that the results generally will be poor.

This situation is unfortunate because a well-written book on this subject could help to fill a public need. The author has dealt with his subject in a superficial manner, which can result in misinformation and misunderstanding. Therefore, I cannot recommend the book either to the interested laity nor to physicians.

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Clinical application of blood gases

Fundamental laws of physics and chemistry, in which all blood gas analysis and interpretation are based, are reviewed in an easily understandable fashion in the first section of Clinical Application of Blood Gases. A concise explanation of the actual instrumentation needed for measuring blood gases is provided.

This section is followed by a basic review of the physiologic mechanisms of respiration and cardiovascular dynamics, and the application of ventilation and perfusion of the lung tissue. The authors proceed to explain dead space to tidal volume (VD/VT) and the importance of calculation of dioxide content and the causes that shift the dioxide dissociation curve. Blood gas analysis also is reviewed from a metabolic viewpoint, with emphasis on the renal mechanism involved and how the regulation of various ions is maintained. The substantial explanation of respiratory mechanics includes numerous clinical examples of hypoventilation and hyperventilation.

The discussion on blood gas interpretation starts with the basic norms and then progresses to multiple clinical examples, which would well serve any young physician starting a rotation in a special care unit or would provide the more advanced physician with a quick brushup. Updated explanations for obtaining arterial blood gas samples include descriptions and diagrams of apparatus. The single puncture technique and a method for cannulation of an artery for multiple samples are delineated. The use of an indwelling catheter for monitoring pressure also is included.

Verification of the accuracy of results obtained with tonometry is dealt with. The goals of dioxide therapy are reviewed along with various methods of delivering supplementary dioxide in high- and low-flow systems. A section is included on the anticipated results when dioxide is implemented as a drug in the clinical states. Use of the Swan-Ganz catheter for pathologic states is considered with clinical examples. The text concludes with a series of cases relating to the didactic material presented.

In my opinion, the discussion concerning mechanical ventilators should have included the basic settings necessary for initiating artificial mechanical ventilation for a patient, which would seem appropriate in this type of text.

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The clinical management of muscle disease: A practical manual of diagnosis and treatment

The Clinical Management of Muscle Disease is a practical manual and would be a distinct adjunct to the library of anyone, including general practitioners, who must deal with patients afflicted with muscle disease. Topics such as management of the patient and counseling of the family are covered concisely. Therefore, quick reference is possible during office hours. The book contains only 156 pages, but the information is condensed to such a degree that experienced practitioners who handle a large volume of these patients will find it useful.

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At the end of each chapter the author provides a bibliography for more complete study, if one so desires. This monograph is complete enough to include a list of foods with high-potassium and low-sodium content for use by the practitioner to set up a specific dietary program for the patient with muscle disease.

This text is not meant to be an extensive treatise on the subject of muscle disease, as it excludes pathologic characteristics and theoretical discussions. However, the content cannot help but reflect the author's vast knowledge and experience in the field. The reader is instilled with a sense of added confidence in areas where he can be of more practical assistance to people afflicted with conditions previously thought untreatable.

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Elements of psychotherapy

In the introduction to Elements of Psychotherapy, Allen J. Enelow states in a footnote, "I am aware that some types of psychotherapy make use of massage and other forms of prolonged and or repeated contact between patient and therapist. These are not included in this book." In fact, the index of the text does not even include the words "psychosomatic," "somatopsychic," or any similar terms referring to a holistic approach. I feel these are most unfortunate oversights or paucities of information in a text intended to "provide the beginning therapist with a general introduction to the field [of psychotherapy] and a broader view of this..." [italics mine]. All of this is an unfortunate example of the mind-body dichotomy and the failure of some psychiatrists and other psychotherapists to give more than lip service to the idea that the head is connected to the rest of the body.

These omissions are all the more astonishing because Dr. Enelow is director of the Division of Health Behavior at the West Coast Cancer Foundation. There has been a great deal written and discussed recently on cancer and the emotions and cancer and immunologic resistance as well as guided imagery, hypnotism, meditative techniques, and other psychotherapies in cancer treatment. I certainly would be interested in Dr. Enelow's views on any or all of these. I know Dr. Enelow's work through his films in psychiatry, which are excellent; I have used them in classes.

The very positive aspects of the text are that it is compact, brief, and well-written as far as the material it does cover. Despite no formal mention of psychosomatics, there are excellent case reports on the treatment of ulcers and dermatitis. For a student in the health professions who already is overwhelmed by the amount of reading required and who is starting to perform psychotherapy, it could be a valuable text. The more sophisticated medical student of present-day classes might be desirous of more information.

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Books received

New books received by the Andrew Taylor Still Memorial Library are acknowledged below. Those of greatest interest to readers will be reviewed later.
