

of information from the catecholamine to the cellular machinery can be derived. The last two chapters, "Regulation of adrenergic Receptors" and "Clinical Studies of Receptor Alterations," review briefly the new knowledge about the physiologic regulation of adrenergic receptors, describe how such regulation controls tissue sensitivity to catecholamines, and touch on what implications alterations in number or characteristics of receptors have in physiologic or diseased states.

The material in the book is inevitably technical and places particular emphasis on the methodology of radioligand-binding studies. This will be of limited interest to many anesthesiologists, but makes the book almost indispensable for investigators in the field of adrenergic pharmacology.

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Relief of Intractable Pain. Second edition. BY MARK SWERDLOW. Amsterdam, Netherlands, Elsevier/North Holland Biomedical Press, 1978. Pages: 338. Price: \$16.50.

The first edition of this book, published in 1974, was a welcome addition to the more comprehensive literature on chronic pain. The second edition is a more polished and better edited volume, with new type face, improved chapter headings, and sequential organization, placing theoretical considerations before treatment. It suffers, however, from the lack of new material in most of the chapters. Those on Intrathecal and Extradural Blocks, Percutaneous Cordotomy, Neurosurgery and Radiotherapy, Anticancer Drugs, and Hormones are virtually unchanged from Volume 1.

Mersky, writing on the Psychological Aspects of Pain, has added sections on psychodynamics, behavioral approaches and biofeedback that are useful additions to his earlier material.

Foldes has added to his previous chapter a short section on narcotic receptors and endogenous ligands, and has expanded his chart on tranquilizers useful in the treatment of pain. While the chapter discusses the pharmacology of the various classes of pain-relieving drugs, it fails to present an organized approach to the treatment of chronic pain itself. The section on anti-anxiety drugs is inadequate in its discussion of the liability for addiction potential and the depressant effects of some of the benzodiazepine derivatives.

The chapter on peripheral nerve blocks, by Churcher, is a definite improvement over the earlier work. There is over-emphasis, however, on the use of neurolytic agents, and a preoccupation with cancer pain. The treatment of the more common benign pains, particularly low-back pain, is inadequate despite the extensive body of literature available on the subject.

While the first portion of the chapter on blocking of the sympathetic nervous system has been reorganized into blocking of afferent and efferent systems, it is still lacking in regard to the afferent mechanisms.

The chapter on Stimulation, by Donlin Long, probably the best reason for purchasing this book, is a comprehensive and unbiased review of the use of stimulation as a modality of therapy of chronic pain. Included are the uses of the various forms of stimulation, factors determining the choice of method, and expected results. It is unfortunate, however, that the lead time required for publication precluded inclusion of information now available on the mediation of pain relief by stimulation via the endogenous opiate system.

Section II of Lipton's chapter on Pituitary Injection of Alcohol

is new, and discusses primarily the technique and complications of chemical pituitary adenolysis in the author's own patients. Only briefly does he allude to the spread of alcohol via the pituitary stalk to the hypophysis and the possible relationship to the production of enkephalin.

In general, this is a useful text on the management of chronic pain for the anesthesiologist, as it suggests alternatives to the nerve-blocking methods of treatment to which he is oriented. It is lacking, however, in adequate information about a multidimensional approach to the management of chronic pain, particularly in regard to psychological techniques.

The price seems somewhat high.

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Outline of Human Anatomy. Revised edition. BY SAUL WISCHNITZER. Baltimore, University Park Press, 1978. Pages: 404. Price: \$9.00.

This revision of an original work first published in 1963 is presented specifically for the student of anatomy. It utilizes a regional approach rather than the conventional organ-system format. The text is arranged so that, wherever appropriate, the illustrations always appear on the left-hand page with descriptive text on the opposite page. The contents include the following regions: head, neck, upper extremities, thorax, abdomen, pelvis, lower extremities, and back.

As the title states, the book is an outline, and therefore can only address the fundamental features of anatomy in concise terms. Each major region is subdivided into four sections with lists of the structures in groups such as muscles and nerves. The index of 27 pages seems adequate.

While the book generally meets its objectives, it has some inconsistencies and inaccurate statements.

The author is not consistent in his use of the nomenclature of either the Birmingham revision or that which was adopted by the 7th International Congress of Anatomists in New York; for example, he refers to the piriform fossa as a recess. The statement that the blood supply to the face is, "principally the facial artery," is misleading when one considers that the terminal branch of the external carotid artery assisted by the supraorbital and supra-trochlear branches in reality supply at least half, if not more, of this area. The movements of the eyeball are described in Latin terms, and the expressions, "up" and "down" are used when referring to the rotatory movements around the horizontal axis.

The pen-and-ink illustrations are generally adequate to portray anatomic structures, but those containing much detail are too small and lack clarity. In Plate 56, on page 206, the artist has attempted to compare the blood supply on one side of the thorax with the nerve supply on the opposite side. Since the artist has chosen a solid line for the blood supply and a hollow, or double line, for the nerve supply, a non-critical glance by the reader would tend to transpose the functions of the two structures. On page 228, Plate 63, a diagram illustrating the bronchopulmonary segments depicts the carinal bifurcation as having equal angles, an impression one should surely try to avoid in a student text.

Outline of Human Anatomy cannot be recommended, either, as a companion to standard texts or as additional reading for anesthesiologists. The book falls short of the clear visual presentation of the systematic and regional anatomy that is so important to the resident in anaesthesiology, as well as the practicing physician, and can be gained from the many excellent text-atlases currently available. I would also add that, by its very nature, anatomy is not a