

briefly. Following this introductory phase, the wide scope of thoracic surgery is covered as individual operative procedures with a mention of indications, contraindications, preoperative preparation, and postoperative complications and their management.

Written material is presented in an amplified outline form. Illustrations are numerous and consist of full page plates, many of which contain more than one figure. These illustrations are concerned with either principles of treatment or anatomic details of surgical procedures, and are clear and well labelled. No bibliography is included.

The experience of this reviewer makes it inappropriate to comment upon accuracy and validity of the treatment of thoracic surgical procedures as presented. As a separate subject, anesthesia is not specifically discussed, but many references to problems encountered in anesthetic practice are mentioned, such as, blood loss, relief of pain following chest injuries, evaluation of position for thoracotomy, inadequate respiration during thoracic surgery. Surgical techniques are thoroughly presented at the expense of physiological principles underlying management of thoracic surgery. As a result some perhaps questionable statements are made. For example, "... oxygen should be administered for at least a few hours postoperatively in order to assure maximum oxygenation during a period when respiration may still be depressed and gas exchange partially blocked by residual secretions in the peripheral respiratory passages." It might be argued that oxygen therapy in these situations might merely mask the difficulty which exists. If oxygen is to be used it should be accompanied by adequate respiratory volume, which may necessitate tracheobronchial cleansing. It is also mentioned that "... carbon dioxide retention causes an elevation of blood pressure." This is stated without equivocation. It is also stated that the usual cause of anoxia is bronchial occlusion due to tracheobronchial secretions during thoracic surgery. This statement is made without comparison or evidence that this is more common than other causes of hypoxia. The authors, however, constantly stress the importance of considering the physiology involved in thoracic surgery and its important role in the management of patients.

There appears to be an absence of emphasis on such problems as (1) effect of depressant drugs upon patients with severe respiratory disease and/or large amounts of respiratory secretions, and (2) problems of spillage of material from one area of the thorax into healthy lung occurring either in empyema, abscess, or patients with blown bronchial stumps. Considerable emphasis is placed on postoperative complications.

The main addition to this second edition is in the area of cardiovascular surgery. A wide variety of surgical lesions are discussed and their surgical repair illustrated. The discussion of the principles of hypothermia and extracorporeal circulation are extremely brief and superficial, with general management of these patients minimally emphasized in relation to the emphasis placed upon surgical techniques.

It would appear that this book serves well in fulfilling the authors' desire for an "atlas of thoracic surgical operations." It contains little other material which would further inform physicians practicing anesthesia.

WILLIAM K. HAMILTON, M.D.

**New Soviet Surgical Apparatus and Instruments and Their Application.** EDITED BY M. G. ANAN'YEV. Translated from the Russian by J. B. Elliott. Translation edited by David Brooks, M.D., Research Assistant at St. Mary's and Westminster Hospitals. Cloth. \$12.50. Pp. 222, with 10 tables and 34 illustrations. Publisher, Moscow Ministry of Health, 1957 (original). Printed in Great Britain by Pergamon Printing and Art Services Ltd., London, 1961.

This book is compiled from a symposium held in December 1956, to summarize the first five years of work of the Scientific Research Institute for Experimental and Surgical Apparatus and Instruments (1951-1955).

The early chapters outline the basic trends in designing suturing apparatus and points out problems involved, including structure of both tissues and materials from which instruments may be made. Definite and acceptable progress has been made with lung artery and vein angiorrhaphy apparatus, and with bronchial stump suturing. Tantalum staples have

been accepted as the preferred suture material. Some experimental work has been done with atrial mechanical suturing, and this has been used on a few patients. An electric pressure gauge has been devised for intracardiac measurements.

Several chapters are devoted to mechanical suture of vessels "which gives automatic and irreproachable angiorrhaphy." One fairly simple bit of apparatus has been developed which "fulfills all the most essential and more practical requirements of vascular surgery, i.e., the suturing of blood vessels from 2.5 to 8 mm. in diameter."

A remarkable set of instruments evidently has been developed for surgery of the abdominal section of the esophagus. It is pointed out that by no means every surgeon can use these instruments, and suggestions are offered as to what additional types of instruments are needed. The use of an instrument for doubly suturing stomachs with tantalum wire is described. Such tools are also being employed for intestinal anastomoses.

Electronarcosis is being studied. This chapter ends with: "Further investigations are needed to perfect the apparatus and develop methods which would give deep anesthesia with the minimum detrimental effect of the current on the body." A few data are given concerning currents used.

Defibrillators and artificial pump oxygenators have been studied. Their state of development at the time of publication of this book was associated with about the same problems confronting others working in this field at that time. For example: they had a good defibrillator; they could pump blood safely for an hour; with cooling and oxygenation the period of circulatory occlusion could be extended beyond the commonly accepted period; they were using an instrument for experimental cardiac massage; they were studying the methods of neutralizing heparin by protamin and protamin-like substances.

Although the subjects do not fall in place under the title of this book, mention is made of attempts to preserve and transplant entire organs, and to show that by proper treatment nerve cells may be capable of revival after as much as 15 minutes of clinical death.

This book has a cloth cover and litho-

graphed pages. The illustrations are adequate, although the reader would probably have a difficult time in reproducing the instruments from the drawings. There are no references.

This book may offer some stimulus to those interested in electrical narcosis, to vascular surgeons, or to our manufacturers of suturing apparatus. It is obviously not a story of what the Institute is doing in 1961, but of what occurred six years ago.

ROBERT W. VIRTUE, M.D.

**An Atlas of Pain Patterns. Sites and Behavior of Pain in Certain Common Diseases of the Upper Abdomen.** By L. A. SMITH, M.D., Associate Professor of Medicine, N. A. CHRISTENSEN, M.D., Assistant Professor of Medicine, N. O. HANSON, M.D., Instructor in Medicine, D. E. RALSTON, M.D., Instructor in Medicine, R. W. P. ACHON, M.D., Instructor in Medicine, K. G. BERGE, M.D., Instructor in Medicine, G. W. MORROW, JR., M.D., Consultant in Medicine, and A. H. BULBULIAN, Assistant Professor of Medical Education, Mayo Clinic and the Mayo Foundation. Cloth. Pp. 54, with 10 figures and many illustrations, mainly in colour. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Illinois, 1961.

This beautifully bound, printed, and well-illustrated book presents a concept of pain patterns found in five abdominal diseases: hiatal hernia, gastric ulcer, duodenal ulcer, gall bladder disease and pancreatic disease. The mechanism of referred pain is discussed. Some variations in the area to which it may be referred in the five illnesses are given.

This book is of little use to anesthesiologists. It is designed primarily for those attempting to make a differential diagnosis in the above-mentioned diseases, by the location of radiation of pain.

DOUGLAS W. EASTWOOD, M.D.

**Anesthesia and the Law.** By CARL ERWIN WASMUTH, M.D., LL.B., Staff Anesthesiologist, Department of Anesthesiology, Cleveland Clinic Foundation and the Frank E. Bunts Educational Institute, Assistant Pro-