

## BOOK REVIEWS

**DIAGNOSTIC IMAGING IN PEDIATRIC TRAUMA.** John L. Gwinn, Philip Stanley. New York, Springer-Verlag, 1980, 199 pp, illustrated, \$45.00

A book devoted to the applications of diagnostic imaging of the traumatized child has been long needed and is most welcome. Over the past several years, there has been an unfortunately alarming increase in the incidence of accidental and deliberate or self-inflicted injury to children. It is now the leading cause of death in the pediatric age group. Furthermore, as the authors emphasize in the preface, diagnosis and management of the traumatized child differ indeed from that of the adult victim. Finally, the recent technological advances in radiologic diagnosis necessitate an update of the state of the art and an expression of expert opinion regarding when and what modality should be used. Thus, it was very appropriate to recruit experienced radiologists from a reputable and busy pediatric hospital for this task, since their personal practicing policies are often valuable to the radiologist who only infrequently encounters pediatric trauma. The book is conveniently divided into ten chapters on the basis of the anatomic organ systems examined.

The first chapter covers in detail trauma to the urinary tract system. The illustrations are of good quality, and emphasis is placed on the description of observations from different studies in a variety of traumatic conditions. An algorithm has been created listing the imaging modality most likely to reveal the pathology to be performed first. This latter concept should probably be covered in other chapters. In view of the increasing number of invasive GU procedures performed by a variety of medical specialists, the section on iatrogenic trauma could be more elaborate. Also, the role of computed tomographic (CT) scanning in renal trauma should be discussed, since such a procedure may obviate the need for angiography in some cases.

The chapter on head trauma is very detailed but easy to read. CT scanning occupies a major portion of it and justly so. More information with respect to sedation of the uncooperative child would be helpful to the radiologist, especially in view of the unstable clinical status of many patients with head trauma. Possibly because results were not available at the time the book was in preparation, the recent ultrasonic advances in measuring ventricular size and detection of intracerebral bleeding in newborns and infants are not mentioned.

Spinal injuries and facial and temporal bone trauma are very extensively discussed. The section on diagnosis of trauma to the inner ear structures, internal auditory canal, and fallopian canal is too detailed for those radiologists without special interest in neuroradiology. The use of CT and nuclear medicine scanning in facial and vertebral trauma should be mentioned.

The special chapter on nuclear medicine and ultrasound is well written and includes extensive descriptions of techniques and findings as well as illustrations. Considering its applications today, one could conclude that the section on brain scanning is too detailed. On the other hand, brain flow studies are useful in establishing the diagnosis of brain death. For the evaluation of subphrenic collections, a discussion of the use of ultrasonography would have been more useful than that of the combined liver-lung imaging studies.

A concise but thorough presentation on the multiple clinical and

radiological aspects of injury to the thoracic structures is found in the chapter on chest trauma. Mention of the role of CT scanning in the evaluation of mediastinal pathology and more information on respirator-related pulmonary problems (pathophysiology and radiologic evolution of bronchopulmonary dysplasia, for instance) should have been included.

Finally, the material on skeletal trauma is very well organized, with abundant illustrations and good clinical-radiological correlation.

The overall effort of the authors is laudable and welcome. The topics are carefully reviewed, comprehensively written, and each chapter is richly referenced. Much of the bibliography is from the literature dealing with trauma to the adult, which facilitates general reviews of the topics covered. The book should be useful to all interested in the radiologic diagnosis of pediatric trauma.

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**ATLAS OF COMPUTED BODY TOMOGRAPHY.** L. C. Chiu, R. L. Shapiro. Baltimore, University Park Press, 1980, 189 pp, \$19.95

The *Atlas of Computed Body Tomography* is published as a primer on transverse axial anatomy of the human body as depicted by computed tomography. It is a collation of a series of individual articles originally published in *CT. The Journal of Computed Tomography*. The incredible flooding of the literature with articles and books on computed tomography makes it very difficult to produce a text that is not outdated by the first printing. Nevertheless, this book serves well as a general introduction to the field. There is something magical about books that can meet perceived needs of individuals interested in variable amounts of detail. I have used this text for medical students, residents, and visiting radiologists to acquaint them with cross-sectional images. In general, all three groups have stated that perusing the book was a worthwhile initial exercise.

The illustrations were derived from scans made on an EMI CT 5005 scanner with a 320 × 320 matrix. Although these images are not as clear as those from newer units, they have been chosen carefully and illustrate most of the gross morphology. Accompanying radiographs of a cadaver and line drawings are well labeled and balance detail with simplicity. In the various sections the authors include several examples of abnormal studies. You will find it interesting and stimulating to look at the images and make a decision regarding the abnormalities before reading the legend.

The book was published without fanfare using black and white illustrations and inexpensive paper, and this feature is reflected in its relatively low price, which is an added attraction.

In summary, I have found this text to be very useful within the limits implied in the above discussion. The format is good, and I would encourage the authors to update this work with newer CT cross-sectional images.

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