

reader. Each reader will find areas of interest and important information about this lethal and frustrating disorder.

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Pediatric Trauma Anesthesia. Edited by J. M. Berman and C. M. Grande. (*International Anesthesiology Clinics*. Volume 32. Edited by T. W. Feeley.) Boston, Little, Brown and Company, 1994. Pages: 176. Price: \$39.00.

In 1981, when I had my first rotation in pediatric anesthesia with Ed Lowe at Cincinnati Childrens Hospital, there was very little discussion of trauma anesthesia care. Emergency medical systems were less developed. Many times, only patients with "survivable" injuries were transported. Now, perioperative care of the pediatric trauma patient is an emerging specialty, and all anesthesiologists and intensivists should be familiar with it.

Drs. Jeffrey Berman and Christopher Grande, under the auspices of the International Trauma Anesthesia and Critical Care Society, have produced a volume of the *International Anesthesiology Clinics* devoted to topics in pediatric trauma anesthesia. Overall, the text is a well researched multi-author work, although like many "review" series, it suffers from some shortcomings: conspicuously absent are chapters relating to traditional trauma subjects such as burns, drowning, head injury, thoracoabdominal trauma, and penetrating injuries.

There are, however, some genuine shining stars in the text. Steven Hall and Alexandra Mazurek have produced a pair of chapters that constitute a remarkable, if somewhat depressing, exposé of trauma patterns and demographics. Their chapters clearly reflect the urban nature of their practice but will be of value to all pediatric caregivers. There also are a number of very good, practical clinical pearls. Gavin Elliott has collected a number of handy formulas that should allow those who don't routinely care for children to estimate the diameter and size of endotracheal tube required (these formulas are all available elsewhere, but I've never seen them assembled in one place). Michael Badgewell has presented an interesting correlation that I had never thought of before—the wiggle, open, answer rule (that is, children who can wiggle their toes to command, open their eyes, and answer questions) for rapid estimation of Glasgow coma score. Badgewell's chapter also contains a timely summary of the American Academy of Pediatrics guidelines for sedation.

There are some areas that were distracting because of minor inaccuracies: it is noted that H₂ agonists and metoclopramide *decrease* (emphasis mine) gastric pH (page 37), the use of uncommon units such as the reference to a 20 Charriere chest tube (page 63), and opioid dosages that usually are not considered equi-analgesic (page 68). There were some statements that I am unable to confirm, such as on page 116, "Tricyclic antidepressants . . . are the most widely prescribed drugs. . . ." Most intriguing is a statement with an incomplete reference dealing with cyanide toxicity: "Lethal effects of CN can be reversed by artificial respiration" (page 109).

These minor glitches aside, this text is an admirable effort on the part of all authors and editors and deserves a place on the shelf in every anesthesia department library.

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Max Brödel: The Man Who Put Art into Medicine. By R. W. Crosby and J. Cody. New York, Springer, 1991. Pages: 352. Price: \$49.00.

Those of us who became physicians after 1950 may believe that medical illustration began with Frank Netter. This book, a biography of Max Brödel (1870–1941), will dissuade them. According to the authors, Brödel established current standards for medical illustration while he worked as an illustrator at Johns Hopkins Hospital during its formative years. There he founded a school of medical illustration and trained many students who made important contributions to the field. Among his friends and colleagues he included Harvey Cushing, then Assistant Resident under William Halsted, gynecologists Thomas Cullen and Howard Kelly, internist William Osler, and obstetrician J. Witteridge Williams. Brödel's drawings illustrate textbooks by Cullen and Kelly and many early papers by Cushing. Brödel was a close friend of Baltimore columnist and satirist H. L. Mencken and long a member of Mencken's famous "Saturday Night Club," an informal group that met weekly to socialize, drink beer, and make music—Brödel was an accomplished pianist.

Born in Leipzig, Germany, to a family of modest means, Brödel studied at the art institute there. After graduation he worked for a time in the laboratory of Carl Ludwig, world famous physiologist and inventor of the kymograph drum and the stromuhr, an early apparatus for measuring blood flow. While working in Ludwig's laboratory, Brödel met two American postdoctoral students, William Henry Welch, soon to be appointed Dean of the newly formed medical school at Hopkins, and Franklin P. Mall, whom Welch would select as the school's first chair of the anatomy department. Both men helped recruit Brödel to Hopkins, where he would remain for the rest of his career.

Several things make this biography interesting. First, it tells of the work of a man who made important contributions to the development of modern medicine: Illustrations were essential for the dissemination of information about new surgical techniques, many of which were developed at that time. In a sense, Brödel's move from Ludwig's laboratory to Johns Hopkins symbolizes the transfer of leadership in medicine from prewar Germany to the United States. The book also contains fascinating vignettes of social life in Baltimore and the medical community of Johns Hopkins at the turn of the century. In this regard, the book nicely complements biographies of Welch by the Flexner brothers,¹ of Osler by Cushing,² and of Cushing by John Fulton.³ The book also serves as a sobering reminder of the impotency