tic agent. The desired oxygen and anesthetic concentration would be entered into the machine, and infrared measurements in a feedback control loop with liquid injection would maintain the desired concentrations with virtually no waste. Current vaporizers and flow meters would be outdated—the automobile equivalent of points, condensers, and carburetors. All this would allow one to deliver the maximum possible number of MAC hours per bottle of inhalational agent. Discussions such as this make this book valuable to all practitioners.

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Whereas other anesthesiology books contain large sections on the topic of pediatric regional anesthesia, *Regional Anesthesia in Infants, Children, and Adolescents* remains the only textbook currently on the market that is devoted entirely to the subject of pediatric regional anesthesia. The strongest feature of the book is that it is produced by a renowned group of authors who have a vast and broad experience in the use of regional anesthesia techniques in pediatric patients. They have taken the knowledge they have gained from their many protocols and outcomes studies and coupled this information with a thorough review of the world literature, not just the English language literature, to create a commendable piece of work.

The translation from French to English by Rita Khandawala is very professional, and leads one to believe that the book was originally written in English. However, the text is not without error, and some of the mistakes are substantial. Legends are reversed in tables, and several drawings, while anatomically correct, are incorrectly labeled. These errors lead this reviewer to suggest that this book may be more useful to the experienced regional anesthetist, who can recognize the errors, and may not be for neophytes just learning pediatric regional anesthesia techniques.

Two blocks are synonymous with the Dalens' name, the fascia iliaca technique for neuroblockade of the lumbar plexus and the paracervical approach to blockade of the brachial plexus. It is this reviewer's opinion that these blocks are major and important advances in pediatric regional anesthesia; however, in the original journal articles, the supporting artwork lacked detail, size, and color. These aspects made it very difficult to understand the landmarks and fascial planes inherent to the successful placement of these blocks. Unfortunately, once again, the plates in the textbook lack the size, labeling, and color needed to render them supportive and useful. Two full-color pages would have made a remarkable difference.

Perhaps the best single aspect of the book is the wonderful chapter on "Pharmacology" by Isabelle Murat. In just 30 pages, she helps one understand why children obtain dense blocks with dilute local anesthetic solutions such as 0.125% bupivacaine and why neonates are at increased risk of local anesthetic toxicity. This chapter and the authorship by Professor Dalens on the majority of the remaining clinically relevant chapters in the book make it a reasonable buy for $105.00.

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Nitric oxide (NO), a simple free radical molecule, was classified for many years as a noxious air and smoke pollutant, but since 1986, it has become an exponentially increasing focus of biomedical research. (Fig. 1). The seminal observation that NO was endothelium-derived relaxing factor, and that NO was involved in the regulation of blood pressure, was also important as a neurotransmitter, and functioned as a defensive molecule to kill invading microorganisms has stimulated an enormous variety of research projects. The discovery of the use of inhaled gaseous NO as a selective pulmonary vasodilator rapidly transported this molecule into the fields of anesthesiology and critical care medicine, where we currently use it as an experimental therapeutic agent to reverse pulmonary hypertension and improve ventilation-perfusion matching in the lung. Nitric oxide interacts with oxygen and oxygen-derived molecules and radicals in the lung, reducing toxic effects. Balancing its beneficial roles, NO can bind with oxygen-derived superoxide to form the toxic radical peroxynitrite.

Drs. Weir, Archer, and Reeves compiled the results of their own research studies and the contributions of 66 authors from 14 states, Canada, and five European countries within the 27 chapters of this hardcover book. This compendium compresses an enormous variety of information (e.g., 1,700 references) between its covers. Unfortunately, it contains neither an introduction nor a preface by the editors. Each chapter appears to be written independently, some in the style of a review article, some original manuscripts with detailed methods. The 137 figures often have long legends, and many seem reprinted from the original reports. The 17-page index is quite inclusive and useful.

After an initial review of the chemistry and physiology of oxygen and oxygen-derived species, 15 chapters compose a section describing a variety of physiologic and biochemical interactions of various radicals and NO with mammalian cells (e.g., lipid and protein oxidation, endothelial function, phosphodiesterase isoenzymes, oxidant defense mechanisms). The subsequent 10 chapters depict the close relationship of NO metabolism to clinical pulmon ary pathophysiology (i.e., inducible NO synthase in sepsis, the interaction with cyclic guanosine monophosphate, the regulation of pulmonary vascular tone, the roles of exhaled and inhaled nitric oxide in the neonate, lung, and heart transplant patients).

Who should buy and read this book? The resident, fellow or attending, who uses NO in clinical anesthesiology or intensive care medicine, or the researcher with an M.D. or Ph.D. background who is beginning a NO-related project? Each could profitably read at least one or two chapters and obtain a very good review of their subject. Hereafter, they would need to read the well-cited original references and textbooks to more completely understand the more complex molecular and biologic-related chapters, or obtain a broader overview.

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