BOOK REVIEW

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Review of: Disposition of Toxic Drugs and Chemicals in Man, 7th Edition

REFERENCE: Baselt RC. Disposition of toxic drugs and chemicals in man, 7th ed., Biomedical Publications, Foster City, CA, 1254 pp., $139.50.

Someone once said that a Ph.D. is a fancy designation for a person who just knows where to look things up in a particular field. If that is true, the Ph.D. must have the 7th edition of Dr. Baselt’s valuable work. This book provides both forensic and clinical toxicologists with a fingertip resource for interpreting drug testing data. In addition, physicians, nurses, law enforcement personnel, and attorneys will find this book an invaluable tool in their respective fields. The analysis and interpretation of drugs and poisons is a complex task requiring knowledge of the chemistry, pharmacokinetics, and pharmacodynamics of the individual agents involved in a case. In Distribution of Toxic Drugs and Chemicals in Man, we have a compendium of such information. In the complicated world of postmortem forensic toxicology, I often find myself reaching for this book to begin my search for the answer to many questions. Whether looking for things I have forgotten, like the half-life of propranolol, or for new information like the blood concentrations of tizanidine following oral administration, this latest installment of Dr. Baselt’s work has demonstrated its worth.

The number of drugs or chemicals has been expanded with 139 new entries including new antibiotics, antidepressants, antidiabetics, antifungals, antihyperlipidemics, antineoplastics, antivirals, diuretics, herbs, herbicides, laxatives, solvents, sedativehypnotics, pesticides, and Alzheimer’s disease medications. The entries are organized alphabetically for ease of locating the agents of interest. There are 1254 pages including an index.

At the beginning of each entry, the author has placed specific pharmacokinetic data including (if available) half-life, volume of distribution, protein binding, and pKa. The chemical structure is also included. The information that follows is divided into five sections. The first, entitled “Occurrence and Usage,” briefly describes the drug or chemical, including brand names, dosages, dosage forms, and the common routes of administration or exposure. The second section, “Blood Concentrations,” outlines the blood concentrations observed following various routes of administration in humans. “Metabolism and Excretion” provides information on the metabolic pathways of the chemicals including percentages of parent and metabolites seen in urine. The next section, “Toxicity,” lists a number of toxic effects along with fluid and tissue concentrations seen in human cases, if they are available. “Analysis,” the final section, deals with some of the ways that various laboratories have analyzed the chemical. A list of references caps the one to five page compilations. While each of these sections is by no means exhaustive, each provides meaningful data for beginning to understand the pharmacokinetic and pharmacodynamic properties of a particular chemical of interest.

For 26 years now, Dr. Baselt’s efforts to publish this series have greatly assisted clinical and forensic toxicologists who want to provide the best information they can to our “customers,” whether they be families, attorneys or physicians. No one reference can, or perhaps should, provide everything you need for a case. But Disposition of Toxic Drugs and Chemicals in Man should be on our shelves to get us started on our journey to understanding the complex world of toxicology.