BOOK REVIEW

Barry Levine, Ph.D.*

Review of Disposition of Toxic Drugs and Chemicals in Man (Fourth Edition)

REFERENCE: Baselt RC, Cravey RH. Disposition of toxic drugs and chemicals in man-fourth edition. Chemical Toxicology Institute, Foster City, CA, 1995

It has been over 15 years since the first edition of Baselt's "Disposition of Toxic Drugs and Chemicals in Man" was published and it is hard to imagine the practice of forensic toxicology without this valuable resource. Over the years, from the first edition to the current fourth edition, several changes have occurred. The organization of the book has changed, from a two volume set divided into centrally acting drugs and peripherally acting/other toxicants to its current alphabetical listing of toxicants. Beginning with the third edition and continuing with this edition, Robert Cravey has joined Dr. Baselt as a co-editor. Most dramatically, the number of toxic substances has more than doubled, from less than 200 in the first edition to over 400 in the fourth edition.

Despite these changes, the basic format has remained constant. For each substance, a two to four page monograph is provided. Each monograph begins with the chemical structure and basic pharmacokinetic information, such as half-life, volume of distribution, Fb and pKa. This is followed by a section which describes the occurrence and use of the substance. Blood concentrations expected from therapeutic use of drugs or environmental or industrial exposure to other chemicals are then summarized. Substance elimination information is then given, often accompanied by a table displaying routes of metabolism. The toxic effects of the compound as well as previous data on fatalities are then discussed. Although specific analytical procedures are not enumerated in detail, the techniques available for analysis of the analyte are given. Each monograph concludes with a list of references, both from refereed scientific journals and from newsletters, etc., broadly characterized in the book as "personal communication." Although these "personal communications" are not necessarily peer reviewed, they nevertheless provide information that may not be accessible to many in the field.

The fourth edition includes monographs of new drugs that have been encountered by forensic toxicology laboratories over the past few years. Over 30 new monographs have been added, including monographs on newer antidepressants such as fluoxetine, sertraline, paroxetine, and venlafaxine and other drugs such as felbamate, ranitidine, and zolpidem. The remaining monographs, although changing only slightly for the most part, were updated to include the scientific literature over the past several years.

Baselt and Cravey's "Disposition of Toxic Drugs and Chemicals in Man—Fourth Edition" continues to serve as the first book that a forensic toxicologist seeks when requiring information about the pharmacology and toxicology of a particular substance. It is a book that should be in the library of all forensic toxicology laboratories.