

BOOK REVIEW

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A Review of Clinical and Experimental Toxicology of Cyanides

REFERENCE: Ballantyne, B. and Marrs, T. C., *Clinical and Experimental Toxicology of Cyanides*, IOP Publishing Limited, Bristol BS1 6NC, England, 1987, hard cover, 512 pp.

This is a multiauthored collection of articles by various workers involved in cyanide toxicology. In their preface, the editors express the hope that this book can serve either as a reference source for specific aspects of cyanide toxicology or can be read in its entirety by those desiring an in-depth understanding of all aspects of cyanide exposure. They also express the hope that the book will be useful to a variety of disciplines including general pharmacologists and toxicologists and forensic pathologists and toxicologists. In general, the editors achieve their aims in that they, and the contributing authors, have put together a wealth of material on cyanide toxicology which should serve as a definitive reference source for forensic pathologists and toxicologists.

The book can be divided into three sections. The first covers the general toxicology of cyanides, the second deals with the forensic science aspects of the chemical, and the third covers the clinical toxicological viewpoint. Of the 23 chapters, 7 are included in the first category, 3 in the second, and 12 in the third. The missing chapter (Chapter 2 in the book) deals with the analysis of cyanide in biological fluids and tissues. The apparent emphasis on the clinical aspects should not detract from the usefulness of this volume to the forensic science community.

To be particularly recommended are the chapters on "Toxicology of Cyanides" (pp. 41-126) with approximately 11 pages of references, "Postmortem Features and Criteria for the Diagnosis of Acute Lethal Cyanide Poisoning" (pp. 217-247) with approximately 5 pages of references, and "Hydrogen Cyanide as a Product of Combustion . . ." (pp. 248-291) with approximately 4 pages of references. Without detracting from the other contributing authors, all three chapters were either authored or coauthored by Ballantyne, long recognized as the leader in the field of cyanide toxicology.

The amount of information included in the other chapters varied depending on the topic. For example, the chapter by Bee on "Cyanides in Murder, Suicide and Accident" is only seven pages long but includes interesting case histories, where as that by Baskin et al, on "Cardiac Effects of Cyanide" is 17 pages long and primarily a summary of research data.

Perhaps one of the few criticisms to be levelled at the book is that there is duplication

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of material among the chapters. Of course this criticism can often be levelled at any multiauthored volume. For example, details on specimen selection for analysis and post-mortem decomposition and formation of cyanide are included in two of the chapters authored by Ballantyne. There are also two chapters, one relating to North American experiences and the other to experiences in the United Kingdom with cyanide poisoning. Obviously there is considerable overlap between some of the material including discussions of route of exposure and symptoms. The chapter on the North American experience does include discussion of the Chicago Tylenol® cases and cyanide poisoning from laetrile.

An interesting aspect of the book is the inclusion by several of the contributing authors of a discussion of the industrial health aspects of cyanide exposure, an area that should possibly have been discussed in a single chapter.

In summary, this book will serve as an invaluable resource to all forensic pathologists and toxicologists interested in cyanide toxicity. In addition, those pharmacology and toxicology graduate students interested in this area will find the book a knowledgeable and detailed review.