

BOOK REVIEW

Pharmaceutical Toxicology,

Nulder, G.J. and Dencker, L., Pharmaceutical Press, London, UK, 2006

The book covers topics in drug toxicity and is aimed at students in pharmacy at the undergraduate and graduate level. The preface states that the book is not meant to cover every aspect of drug toxicity. The authors have chosen a limited number of areas that address the major issues and target organs for drug-induced toxicity.

Twelve contributors representing academic and nonacademic clinicians and scientists are acknowledged. There are 13 chapters in this book and each chapter has a different author. There are several figures, tables, and illustrations throughout the text. Each chapter is subdivided into sections with clear and informative headings. Further readings are listed at the end of each chapter which is adequate to cater the needs of an ambitious reader interested in getting additional information.

The first chapter focuses on the basic principles in toxicology necessary for understanding how toxicity data are used in safety assessment of drugs for human use. In the second chapter, the major route of drug metabolism was briefly discussed. A few examples of metabolism-mediated toxic effects are also provided.

Chapters 3, 4, 5 and 6 describe the molecular and cellular mechanisms of toxicity, teratology or developmental toxicology, genetic toxicology and the mechanisms behind different types of genetic alterations, and the mechanisms of carcinogenicity and the assessment of the potential carcinogenicity of drugs.

Chapters 7, 8, 9 and 10 focus on the organ toxicity of drugs. Toxicity in the liver, the kidney, the respiratory system and the immune system are discussed. Chapter 11 deals with general aspects of clinical toxicology with special emphasis on antidote treatment. The main focus of this chapter is drug poisoning but not chemical or natural toxins. Safety assessment of pharmaceuticals and pharmaco-vigilance are addressed in chapters 12 and 13.

In summary, this book gives enough authentic information to meet the needs of undergraduates and graduate students in pharmaceutical sciences. This book may be useful for supplemental readings in a therapeutics or pharmacology course as well. It is also suitable as a reference book for biologists, toxicologists, pharmacologists, clinicians and a variety of students who wish to obtain additional knowledge of pharmaceutical toxicology.

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