macology information of a selected group of drugs and disease states in a clinically useful manner. The editors and authors have focused on clinical conditions and drugs commonly encountered in the practice of medicine. This book is organized into three sections: (i) designing a dosing regimen—pharmacokinetic and pharmacodynamic principles (Chapters 1–4); (ii) factors influencing design and maintenance of a dosing regimen (Chapters 5–10); and (iii) specific drug groups—special considerations (Chapters 11–25). Each chapter is adequately referenced to the primary literature.

The first four chapters provide a brief overview on pharmacokinetics, pharmacodynamics, and dosage regimen design and three examples of dosage calculations. These chapters provide essential concepts and basic principles for dosage regimen design based on clinical pharmacokinetic and pharmacodynamic considerations.

In section two, there are four chapters that summarize the influences of hepatic, renal, pulmonary, and cardiac disease on the pharmacokinetics of therapeutic agents. Also included are two chapters describing the special considerations of the elderly and drug interactions on the clinical pharmacology of drug therapy. These chapters provide essential background information to further understand the "factors that influence pharmacokinetics of specific agents" in the next section.

The final section consists of 15 chapters that review general clinical pharmacology, factors affecting the pharmacokinetics of specific agents, and dosing recommendations. The drug categories included are analgesics; sedatives, hypnotics, and minor tranquilizers; diuretics; cardiovascular agents; antihypertensive agents; antibiotics; anticoagulants; anticonvulsants; anticancer drugs; drug therapy for gastrointestinal and liver diseases; antidiabetic agents; and lipid-lowering agents. Each chapter includes tables which provide concise summaries of pharmacokinetic parameters and dosing recommendations.

The book provides concise, practical, and relevant information on the clinical pharmacologic approach to drug dosage regimens. The text will be useful to the majority of medical practitioners who wish to incorporate rationale pharmacology into the routine clinical management of adult patients. It should also be a useful reference for pharmacy and medical students that have a good background in general pharmacology.

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Letters to the Editor

In the interesting paper on "Topical Irritation of the Gastrointestinal Tract" by John W. Fara and Robert E. Myrback (*Pharm. Res.* 7, 616, 1990), I was surprised to see that in the Irritation Index, presented in Table III, sodium salicylate rated marginally better than aspirin. This would negate the advantage of aspirin, which was developed as a prodrug to overcome the well-known, heavy stomach irritation of salicyclic acid.

Almost 100 years ago the German physiologist Dreser (*Plueger's Archiv der Generalen Physiologie,* 76, 306, 1899) compared the irritation caused by aspirin and salicylic acid, respectively, in another model. He applied solutions of both to the exposed tailfin of a small fish. Aspirin caused no etching, while salicylic acid caused severe etching of the tailfin. This effect could be ascribed to neither pH nor concentration of alkali salts. An English translation of the pertinent passage of the paper by Dreser can be found in *Pharmacopeial Forum;* Vol. 14, p. 4162, (1988).

Fara and Myrback wisely state that "the correlation between the rabbit model and the human gastrointestinal mucosa needs to be studied further. . . ."

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Dr. Florey has commented that sodium salicylate was found to be marginally better than aspirin in our recently published article (*Pharmaceutical Research,* Vol. 7, p. 616, 1990). However, when comparable doses of each are studied (Table II), there was essentially no difference in irritation values (3.1 ± 0.3 and 3.6 ± 0.5, respectively). Interestingly, these results are inconsistent with the general trend we observed for nonsteroidal antiinflammatory drugs, that irritation potential increased as the solubility of the drug increased.

Although the rabbit colon model may not be a definitive method for ranking colonic irritation of compounds, we feel that the model is useful in identifying irritation potential early in dosage form development. And significantly, we found that many of the compounds with high irritation scores in Table II, including acetylsalicylic acid, are known gastrointestinal irritants in humans.

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