Pharmacological Treatment of Endocrinopathies

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Pharmacological Treatment
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Bone Disease, Kidney Stones and Related Disorders

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Considerable progress has been made recently in the management of nephrolithiasis and osteoporosis. This advance has become largely possible from the evolving pathophysiologic elucidation of these conditions. Thus, treatment modalities could be identified which are capable of correcting the underlying metabolic derangement for various causes of kidney stones and osteoporosis. This book summarizes the clinical pharmacology of nine drugs which are currently available for the management of renal stones and osteoporosis. They are: sodium cellulose phosphate for absorptive hypercalciuria, allopurinol for hyperuricosuric calcium nephrolithiasis, potassium citrate for hypocitraturic calcium nephrolithiasis and gouty diathesis, alpha-mercaptopropionylglycine (MPG) for cystinuria, thiazide for hypercalciuric calcium nephrolithiasis, calcium citrate as a general calcium supplement for osteoporosis, estrogen for postmenopausal osteoporosis, calcitonin for high turnover osteoporosis, and diphosphonate as an effective antiresorptive agent.

Chapters corresponding to the above drugs were written by authors who played key roles in the drug approval by the United States Food and Drug Administration, or who have an extensive personal experience with their use. Each chapter dealing with a separate drug is organized to include a historical perspective, pathophysiology of the treated condition, mechanism of drug action, indication and treatment guidelines, response to treatment, and hazards of treatment. An attempt has been made to describe other treatment options. However, it is acknowledged that the views expressed are those of the authors, which may not always be representative of the beliefs of others in the fields. Moreover, the recommended treatment options are not meant to be definitive. With the continuing evaluation of pathophysiologic elucidation and drug development, it is fully expected that refined, more effective drugs will be formulated in the future.

This book is intended for students of endocrinology, urology or mineral metabolism, comprised of medical students, physicians in training and those caring for patients with renal stones and osteoporosis.