

**Contemporary Cardiology** Series Editor: Christopher P. Cannon

M. Gabriel Khan

# Cardiac Drug Therapy

*8th Edition*



Humana Press

# **CONTEMPORARY CARDIOLOGY**

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M. Gabriel Khan

# Cardiac Drug Therapy

8th Edition



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*To My wife Brigid  
and to our  
Children  
Susan, Christine, Yasmin,  
Jacqueline, Stephen,  
and Natasha  
And to our  
Grandchildren  
Sarah, Patrick, Emma,  
Kathleen, Michael, Roxanna,  
Fiona, Jaxson, James, Fraea,  
Esmé, Jordan, and Joshua*



# Preface

Several foreign translations and favorable reviews of earlier editions provided the impetus to produce an eighth edition of *Cardiac Drug Therapy*. Here is a review of the fifth edition in *Clinical Cardiology*: “this is an excellent book. It succeeds in being practical while presenting the major evidence in relation to its recommendations. Of value to absolutely anyone who prescribes for cardiac patients on the day-to-day basis. From the trainee to the experienced consultant, all will find it useful. The author stamps his authority very clearly throughout the text by very clear assertions of his own recommendations even when these recommendations are at odds with those of official bodies. In such situations the ‘official’ recommendations are also stated but clearly are not preferred.”

And for the fourth edition a cardiologist reviewer states that it is “by far the best handbook on cardiovascular therapeutics I have ever had the pleasure of reading. The information given in each chapter is up-to-date, accurate, clearly written, eminently readable and well referenced.”

The entire text has been revised and, most importantly, continues to give practical clinical advice. New chapters include:

- Endocrine Heart Diseases
- Management of Cardiomyopathies
- Newer Agents

**A new feature involves diagnosis.**

- Because appropriate therapy requires sound diagnosis the short sections on diagnosis given in previous editions have been expanded.

Other highlights include:

- Chapter 11: “Acute Myocardial Infarction” contains more than 24 relevant ECG tracings; an echocardiogram depicting Takotsubo syndrome is shown to remind readers that this syndrome mimics acute MI.
- Chapter 14: “Management of Cardiac Arrhythmias” provides more than 24 ECG samples.
- Chapter 22: “Hallmark Clinical Trials” has been expanded to accommodate the wealth of practical information derived from recent randomized clinical trials.

As in all previous editions, therapeutic strategies and advice are based on a thorough review of the scientific literature, applied logically:

- Scientific documentation regarding which drugs are superior.
- Information on which cardiovascular drugs to choose and which agents to avoid in various clinical situations.
- Information that assists with the rapid writing of prescriptions. To write a prescription accurately, a practitioner needs to know how a drug is supplied and its dosage. Thus, supply and dosage are given first, followed by action and pharmacokinetics, and then advice as to efficacy and comparison with other drugs, indications, adverse effects, and interactions.

The text contains practical advice, such as the following: *The life-saving potential of 160–240 mg chewable aspirin is denied to many individuals who succumb to an acute coronary syndrome because of poor dissemination of clinically proven, documented facts.* The text advises: three ~80 mg chewable aspirins should be placed in the cap of a nitrolin-

gual spray container to be used before proceeding to an emergency room. *Clinicians should inform patients that rapidly acting chewable aspirin may prevent a heart attack or death but that nitroglycerin does not.* The world faces an epidemic of heart failure [HF].

Although medical therapy for acute HF has improved dramatically from 1990, unfortunately more than 50 % of patients require readmission within 6 months of discharge. Several of these patients are not administered appropriate medications to prevent a recurrence. The chapter on heart failure gives practical advice as do other chapters on what drugs are best for a given situation.

Notable physicians have stated that the beta-blockers should not be prescribed for primary hypertension because of their ineffectiveness. Many investigators have reported in peer-reviewed journals that diuretics and beta-blockers cause diabetes and their use should be restricted for the management of hypertension. Chapter 2 discusses these controversies and gives clear answers to clinicians worldwide.

The information provided in the eighth edition should serve as a refresher for cardiologists and internists. The information should improve the therapeutic skills of interns, medical residents, generalists, and all who care for patients with cardiac problems.

*Ottawa, ON*

***M. Gabriel Khan***



# Acknowledgment

I have quoted the published works of several investigators. These persevering women and men of medicine deserve my respect and my thanks.

*A special, thank you, to my wife Brigid, who has allowed me to be a student of the science of Medicine to this day.*

*Ottawa, ON*

*M. Gabriel Khan*



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## About the Author

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Gabriel is a clinical Professor who loves teaching and was appointed Staff Physician in charge of a Clinical Teaching Unit at the Ottawa General hospital and is a Fellow of the American College of Cardiology, the American College of Physicians, and the Royal College of Physicians of London and Canada.

He is the author of *Encyclopedia of Heart Diseases* (2006), Academic Press/Elsevier; *Encyclopedia of Heart Diseases*, 2nd ed., Springer, New York. Online 2011; *Rapid ECG Interpretation*, 3rd ed., Humana Press New York 2008; *Cardiac Drug Therapy*, 7th ed., Humana Press 2007; *On Call Cardiology*, 3rd ed., Elsevier, Philadelphia (2006); *Heart Disease Diagnosis and Therapy*, 2nd ed., Humana Press (2006); *Cardiac and Pulmonary Management* (1993); *Medical Diagnosis and Therapy* (1994); *Heart Attacks, Hypertension and Heart Drugs* (1986); and *Heart Trouble Encyclopedia* (1996).

Dr. Khan's books have been translated into Chinese, Czech, Farsi, French, German, Greek, Italian, Japanese, Polish, Portuguese, Russian, Spanish, and Turkish. He has built a reputation as a clinician-teacher and has become an internationally acclaimed cardiologist through his writings.

Here is an excerpt from the foreword, written by a renowned cardiologist and author, Dr. Henry J. L. Marriott for the book, *Heart Disease Diagnosis and Therapy*:

Whenever I read Khan, I am affected as the rustics were by Oliver Goldsmith's parson:

And still they gaz'd, and still the wonder grew  
That one small head could carry all he knew.

Khan's knowledge is truly encyclopedic and, for his fortunate readers, he translates it into easily read prose.

His peers have acknowledged the merits of his books by their reviews of *Cardiac Drug Therapy*, *the Encyclopedia of Heart Diseases*, and *Rapid ECG Interpretation*.