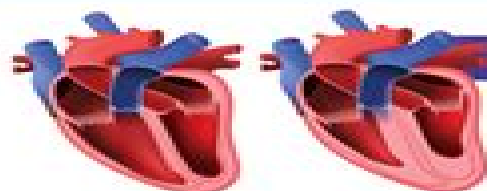




# Exercising with Hypertrophic Cardiomyopathy (HCM)



## What is HCM?

- HCM = Hypertrophic Cardiomyopathy
- Affects 1 in 200 - 500 people worldwide
- HCM is a genetic heart condition that causes thickening of the heart muscle
- HCM can result in abnormal heart function, reduced blood flow out of the heart or an abnormal heart rhythm



## Exercise and HCM

Exercise is encouraged for people with HCM, even in those with ICDs.<sup>1</sup>

Mild to moderate physical activities improve fitness, quality of life, and lowers traditional cardiac risk factors (high blood pressure, high cholesterol), even in those with HCM.<sup>2</sup>

High intensity activity/ competitive sports may be possible after evaluation and guidance by an expert HCM cardiologist.

See your doctor: Physician expert provides a personal exercise prescription



A comprehensive EAP is required to manage a possible cardiac emergency (including player gear removal such as football, hockey)



Proper hydration and replenishment of electrolytes for exercise  
Increase hydration for hotter days and longer activities



## SAFE PERFORMANCE STRATEGIES



Make AEDs accessible and usable within 3-5 min



CPR and AED training is imperative for coaches, officials, and athletic medical staff (all key stakeholders in athletics)



## WHEN TO WORRY

Worsening shortness of breath  
Dizziness or fainting  
Chest pain  
Heart palpitations or fluttering

## 5 Things to Remember For Your Student Athlete

①

Each HCM patient requires an individualized exercise program.

②

Some HCM patients may need a defibrillator.

③

Avoid dehydration and advise no medicines with stimulants and no exercise during viral illnesses.

④

Initiate and maintain communication with the patient and the treating cardiologist.

⑤

HCM patients' 1st degree relatives are at risk to have HCM.

### Abbreviations:

ICD: Implantable Cardioverter-Defibrillator  
EAP: Emergency Action Plan  
AED: Automated external defibrillators  
CPR: Cardiopulmonary resuscitation

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# Heart And Exercise A Practical Guide For The Clinician

**Richard Bailey**



## **Heart And Exercise A Practical Guide For The Clinician:**

**The Heart and Exercise** Randal J. Thomas,1996      **The Heart and Exercise** Randal J. Thomas,1996      **Essentials Of Hospital Medicine: A Practical Guide For Clinicians** Andrew Dunn,Navneet Kathuria,Paul Klotman,2012-11-14

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all of the text figures and references with the ability to search make notes and highlights and have content read aloud

**Practice of Clinical Echocardiography E-Book** Catherine M. Otto, 2021-05-22 Ideally suited for those clinicians who have already mastered basic principles The Practice of Clinical Echocardiography 6th Edition provides expert guidance on interpreting echocardiographic images and Doppler flow data Through practical clear and carefully edited content world renowned expert Dr Catherine M Otto and her team of more than 65 leaders in echocardiography demonstrate how to apply advanced knowledge to daily clinical decision making Newly reorganized sections cover advanced principles for the echocardiographer best practices for echocardiography laboratories transthoracic and transesophageal echocardiography intraoperative and interventional echocardiography and point of care cardiac ultrasound Provides an in depth clear and concise review of the latest clinical applications of echocardiography with an advanced level of discussion now thoroughly updated with new clinical knowledge new treatments and guidelines the latest evidence and innovations in advanced echocardiographic imaging Reviews the technical aspects of data acquisition and analysis with an emphasis on outcomes Covers key topics such as transcatheter interventions for valvular heart disease prosthetic valve dysfunction the athletic heart cardiac assist devices cardio oncology heart disease in pregnancy advanced 3D echocardiography strain imaging stress echocardiography and much more Includes updated illustrations throughout nearly 1 000 echocardiograms Doppler tracings anatomic drawings and flow charts for diagnostic approaches as well as hundreds of echo video clips keyed to images in the text Discusses limitations pitfalls and alternate approaches Features chapter summary boxes with new Quick Reviews and a practical approach to echocardiographic data acquisition measurement and interpretation Enhanced eBook version included with purchase Your enhanced eBook allows you to access bonus images plus all of the text figures and references from the book on a variety of devices

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*The Advanced Practice Nurse Cardiovascular Clinician* Kelley Anderson, 2015-10-20 Focusing on the interdisciplinary team this cardiovascular resource provides evidence based knowledge and guidance for advanced practice nurses in a variety of care settings Its clinically relevant and directly applicable information is presented in an accessible and well organized format The book encompasses clinical findings diagnostic testing state of the art procedures and therapeutic interventions commonly utilized in inpatient and outpatient clinical cardiology It is specifically designed to meet the informational needs of advanced practice registered nurse providers and students including family nurse practitioners adult gerontology acute care nurse practitioners nurse anesthetists and clinical nurse specialists The resource covers the range of cardiovascular conditions both chronic and acute It discusses the interdisciplinary cardiovascular care team explains the cardiovascular history and clinical examination in nearly step by step detail analyzes clinical findings details common stable and urgent conditions describes the preoperative cardiovascular evaluation advises on the selection and appropriateness of laboratory evaluations and cardiovascular diagnostic studies provides an overview of state of the art procedures including electrophysiology and assesses therapeutic interventions including lifestyle pharmacotherapeutics and invasive techniques It supports the development of clinical judgment skills and therapeutic decision making by considering the challenges presented through advances in technology and the increasing complexity of diagnostic procedures An appendix features tables of relevant and essential cardiovascular guidelines for quick reference Key Features Details current and cutting edge practices and contemporary issues in cardiovascular care Applies evidenced based research findings to clinical practice Compares diagnostic testing options and therapeutic interventions Clarifies complex topics through use of tables algorithms images and lists Identifies pertinent studies and resources for cardiovascular care Describes common cardiac procedures and screening methods Supports the development of clinical judgment skills and therapeutic decision making *Murray & Nadel's Textbook of Respiratory Medicine E-Book* V. Courtney Broaddus, Joel D. Ernst, Talmadge E. King Jr, Stephen C. Lazarus, Kathleen F. Sarmiento, Lynn M. Schnapp, Renee D. Stapleton, Michael B. Gotway, 2021-05-28 Known for its clear readability thorough coverage and expert authorship Murray advanced ultrasound applications and procedures interventional pulmonology immunotherapy lung cancer targeted therapy outbreaks pandemics and bioterrorism point of care ultrasound use of high flow oxygen and more Includes extensively reorganized sections on basic science pleural disease and sleep with new chapters and approaches to the topics Features more than 1 450 anatomic algorithmic and radiologic images 400 are new including CT PET MR and HRCT plus extensive online only content 200 procedural and conceptual videos plus audio clips of lung sounds Brings you up to date with the latest respiratory drugs mechanisms of action indications precautions adverse effects and recommendations with increased emphasis on algorithms to illustrate decision making Enhanced eBook version included with purchase Your enhanced eBook allows you access to all of the text figures reporting templates and references from the book on a variety of devices *The Practical Home Physician* Lyman, 1886

Medizin Laien      **Cardiovascular/pulmonary Essentials** Donna L. Frownfelter, 2007 Integrates the Guide to Physical Therapist Practice as it relates to the cardiopulmonary system in clinical care Edited in a user friendly format that not only brings together the conceptual frameworks of the Guide language but also parallels the patterns of the Guide In each case where appropriate a brief review of the pertinent anatomy physiology pathology pharmacology and imaging is provided Each pattern then details two to three diversified case studies coinciding with the Guide format The physical therapist examination including history a systems review and specific tests and measures for each case as well as evaluation diagnosis prognosis plan of care and evidence based interventions are also addressed      *Clinical Cardiology: Current Practice Guidelines* Demosthenes G. Katritsis, Bernard J. Gersh, A. John Camm, 2016-09-15 Clinical Cardiology Current Practice Guidelines Updated Edition is an essential tool for the busy clinician offering succinct yet detailed access to the most recent trial and guideline data supporting practice and patient management in cardiology ESC and ACC AHA guidelines are continually updated and often overlap in their advice making it difficult for the cardiologist to obtain a clear picture of the right way to diagnose and treat disease according to the latest evidence base Written by leading authorities in the field this book together with its regularly updated online version provides a unique solution The authors have scrutinized all available guidelines and research from both ACC AHA and ESC on every clinical issue The result is a rigorous examination of the implications of published guidance illustrated by more than 600 easy to follow tables and 200 full colour images which reinforce key points and clarify difficult concepts 87 comprehensive chapters explore the definition epidemiology pathophysiology diagnosis and management of cardiac disease Two new chapters examine the univentricular heart and venous thromboembolism Each chapter encompasses the latest published research followed by discussions of possible presentations and investigations offering detailed insights for clinicians into best practice for diagnosis and treatment Providing at a glance access to the best guidance in cardiology this book offers a diagnosis and management toolkit which no practising cardiologist can afford to be without      **Translational Research in Cardio-Oncology, An Issue of Heart Failure Clinics** Ragavendra R. Baliga, George A. Mensah, 2022-06-23 In this issue of Heart Failure Clinics guest editors Drs Ragavendra R Baliga and George A Mensah bring their considerable expertise to the topic of Translational Research in Cardio Oncology Top experts in the field cover key topics such as radiation induced cardiac dysfunction training and career development cardiovascular imaging CAR T cell therapy and cardiovascular disease and more Contains 12 relevant practice oriented topics including cardio protection of high risk individuals myocardial metabolism amyloidosis arrhythmic complications associated with cancer therapies and more Provides in depth clinical reviews on translational research in cardio oncology offering actionable insights for clinical practice Presents the latest information on this timely focused topic under the leadership of experienced editors in the field Authors synthesize and distill the latest research and practice guidelines to create clinically significant topic based reviews      **Clinical Cardiology** Demosthenes Katritsis, A. John Camm, Bernard J. Gersh, 2016 An essential tool

for the busy clinician providing succinct yet detailed access to the most recent trial and guideline data supporting practice and patient management in cardiology      **Heart Failure E-Book** G. Michael Felker, Douglas L. Mann, 2014-12-18 Lead editor of Braunwald's Heart Disease Dr Douglas L Mann and nationally and internationally recognized heart failure expert Dr G Michael Felker bring you the latest definitive state of the art information on heart failure in this outstanding Braunwald's companion volume Heart Failure 3rd Edition keeps you current with recent developments in the field improved patient management strategies and new drug therapies and implantable devices that will make a difference in your patients lives and your practice      *Murray & Nadel's Textbook of Respiratory Medicine E-Book* Robert J. Mason, Arthur Slutsky, John F. Murray, Jay A. Nadel, Michael B. Gotway, 2015-03-17 Ideal for fellows and practicing pulmonologists who need an authoritative comprehensive reference on all aspects of pulmonary medicine Murray and Nadel's Textbook of Respiratory Medicine offers the most definitive content on basic science diagnosis evaluation and treatment of the full spectrum of respiratory diseases Full color design enhances teaching points and highlights challenging concepts Understand clinical applications and the scientific principles of respiratory medicine Detailed explanations of each disease entity allow you to work through differential diagnoses Expert Consult eBook version included with purchase This enhanced eBook experience offers content updates videos review questions and Thoracic Imaging Cases TICs all of which are easily navigable on any device for access on rounds or in the clinic Includes more than 1 000 figures and over 200 videos and audio files Key Points and Key Reading sections highlight the most useful references and resources for each chapter An expanded sleep section now covers four chapters and includes control of breathing consequences of sleep disruption as well as obstructive and central apnea New chapters in the Critical Care section cover Noninvasive Ventilation NIV and Extracorporeal Support of Gas Exchange ECMO New chapters focusing on diagnostic techniques now include Invasive Diagnostic Imaging and Image Guided Interventions and Positron Emission Tomography and a new chapter on Therapeutic Bronchoscopy highlights the interventional role of pulmonologists Embedded videos feature thoracoscopy therapeutic bronchoscopy volumetric chest CT scans and more Brand new audio files highlight normal and abnormal breath sounds and the separate components of cough

**National Library of Medicine Current Catalog** National Library of Medicine (U.S.), 1993 First multi year cumulation covers six years 1965 70      **Pfenninger and Fowler's Procedures for Primary Care E-Book** John L. Pfenninger, Grant C. Fowler, 2010-09-23 Pfenninger and Fowler's Procedures for Primary Care 3rd Edition is a comprehensive how to resource offering step by step strategies for nearly every medical procedure that can be performed in an office hospital or emergency care facility by primary care clinicians Designed for everyday practice the outline format allows speedy reference while the detailed text and clear illustrations guide you through each procedure The new edition of this best selling book features full color illustrations and easy access to the complete contents and illustrations patient forms and more online at [www.expertconsult.com](http://www.expertconsult.com) Understand how to proceed step by step thanks to detailed text and illustrations Locate critical

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**Coronary Artery Disease, An Issue of Heart Failure Clinics** David M. Shavelle, 2016-01-07 Coronary artery disease continues to be a major cause of morbidity and mortality in the United States and throughout the world This issue of the Heart Failure Clinics provides a contemporary and concise yet extensive review on all aspects of the management of patients with coronary artery disease Topics include but are not limited to Epidemiology Traditional and Novel Risk Factors in Coronary Artery Disease Acute Coronary Syndromes Unstable Angina and Non ST Elevation Myocardial Infarction Calcium Scoring and Cardiac Computed Tomography Coronary Artery Disease and Diabetes Mellitus Cardiac Syndrome X and Revascularization Options Coronary Artery Bypass Surgery and Percutaneous Coronary Intervention

**Manual of Heart Failure Management** John D. Bisognano, Marc L. Baker, Mary Beth Earley, 2009-04-09 Heart failure is an increasingly common occurrence in the patient population despite better treatment and management options available to clinicians The focus is now increasingly turning towards prevention to reduce the rising incidence in addition to more efficacious treatment regimens With emphasis on practical knowledge and easy reference this title is designed to present the relevant diagnostic management and treatment information in an easily digested and evidence based algorithm format With use of illustrations readers will be able to rely on this text as a basic primer when studying patients with this complex and multifaceted set of diseases

**Textbook of Interventional Cardiology** Eric J. Topol, MD, Paul S. Teirstein, MD, 2015-09-30 Ideal for cardiologists surgeons and referring physicians who need a clinical guide to interventional procedures Textbook of Interventional Cardiology focuses on the latest treatment protocols for managing heart disorders at every level of complexity In this updated edition Dr Topol continues to bring together experts in the field who present the current state of knowledge and clinical practice in interventional cardiology including cutting edge theories



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