

1. Record Nr.	UNINA9910787329703321
Titolo	Heart rate variability (HRV) signal analysis : clinical applications // edited by Markad V. Kamath, Mari A. Watanabe, Adrian R.M. Upton
Pubbl/distr/stampa	Boca Raton : , : Taylor & Francis, , 2013
ISBN	0-429-10141-4 1-4398-4981-1 1-4398-4980-3
Descrizione fisica	1 online resource (523 p.)
Altri autori (Persone)	KamathMarkad V WatanabeMari A UptonAdrian R. M
Disciplina	612.8/9
Soggetti	Heart rate monitoring Heart beat - Measurement Heart beat - Physiological aspects Heart function tests Signal processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Contents; Preface; Acknowledgments; Editors; Contributors; Chapter 1 - Heart Rate Variability: A Historical Perspective; Chapter 2 - Methodological Aspects of Heart Rate Variability Analysis; Chapter 3 - Methodological Aspects of Baroreflex Sensitivity Analysis; Chapter 4 - Arterial Blood Pressure Waveform Analysis and Its Applications in the Assessment of Vasovagal Syncope; Chapter 5 - Heart Rate Turbulence; Chapter 6 - Phase-Rectified Signal Averaging: Methods and Clinical Applications Chapter 7 - Heart Rate Variability Analysis for the Monitoring of Fetal Distress and Neonatal Critical Care Chapter 9 - Effects of Exercise Training on Heart Rate Variability in Patients with Hypertension; Chapter 8 - Heart Rate Variability and Blood Pressure Variability in Obstetrics and Gynecology; Chapter 10 - Heart Rate Variability and Sleep; Chapter 11 - Heart Rate Variability in the Intensive Care Unit; Chapter 12 - Heart Rate Variability and Cardiovascular Dynamic

Changes during Local Anesthesia; Chapter 13 - Effect of General Anesthesia on Heart Rate Variability  
Chapter 14 - Heart Rate Variability in Functional Neurosurgery  
Chapter 15 - Bariatric Surgery and Its Effects on Heart Rate Variability; Chapter 16 - Heart Rate Variability in Congestive Heart Failure; Chapter 17 - Heart Rate Variability Analysis in Ischemic Cardiomyopathy and Aortic Stenosis Patients; Chapter 18 - Heart Rate Variability and Blood Pressure Variability in Respiratory Disease: Effects of Pharmaceutical Compounds, Non-Invasive Ventilation and Physical Exercise; Chapter 19 - Effects of Spinal Cord Injury on Heart Rate Variability and Blood Pressure Variability  
Chapter 20 - Autonomic Dysfunction in Stroke  
Chapter 21 - Significance of Heart Rate Variability in Patients with Epilepsy; Chapter 22 - Classification of Parkinson's Disease Severity Using Heart Rate Variability Analysis; Chapter 23 - Heart Rate Variability in Neuropsychiatric Disorders; Chapter 24 - Heart Rate Variability and Depression; Chapter 25 - Heart Rate Variability as a Measure of Depression and Anxiety during Pregnancy; Back Cover

---

Sommario/riassunto

Written for graduate students and professionals dealing with heart rate variability (HRV), this cutting-edge reference reviews how minute variations in the beat-to-beat heart rate are regulated. It explores how these variations can be used as a window to understanding the central and peripheral mechanisms that modulate the autonomic nervous systems. Explaining how HRV is characterized through simple statistics and frequency analysis in both healthy human subjects and patients with a variety of diseases, the book provides examples for methods that require mathematical techniques. The authors cite a variety of real-life medical situations and offer extensive end-of-chapter references--Provided by publisher.

---