Record Nr. UNINA9910424634603321 Biochemistry of cardiovascular dysfunction in obesity / / Paramjit S. **Titolo** Tappia, Sukhwinder K. Bhullar, Naranjan S. Dhalla, editors Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2020] ©2020 **ISBN** 3-030-47336-8 Edizione [1st ed. 2020.] 1 online resource (XV, 401 p. 55 illus., 48 illus. in color.) Descrizione fisica Collana Advances in Biochemistry in Health and Disease;; 20 Disciplina 616.1 Cardiovascular system - Diseases Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Biochemistry of cardiovascular dysfunction in obesity -- Vascular mechanisms linking RAAS components to obesity-associated hypertension -- Mechanisms of obesity-induced hypertension in adolescents -- Role of the sympathetic nervous system in obesityinduced hypertension -- Sex differences in the mechanisms associated with obesity-induced hypertension -- Leptin as a mediator of obesityinduced hypertension -- Endothelial dysfunction in obesity --Neurohormonal regulation of sympathoexcitation and hypertension in obesity -- Role of obesity in hypertension in children -- Small for gestational age and obesity associated co-morbidities -- Obesity-Related Hypertension in Children -- The relationship between obesity and hypertension -- Hypertension in Obesity and the Impact of Weight Loss -- Parallels in the Evolution of Obesity and Hypertension --Obesity and hypertension -- The microcirculation: a key player in obesity-associated cardiovascular disease -- Sex Differences in Leptin Control of Cardiovascular Function in Health and Metabolic Diseases --Sex differences in the role of leptin and coronary heart disease --Differential effect of subcutaneous abdominal and visceral adipose tissue on cardiometabolic risk -- Sex differences in lipid and lipoprotein metabolism -- Sex differences in the mechanisms of obesity-induced hypertension -- Impaired cardiac function in obese individuals -- Role of Vitamin D deficiency in cardiac function --Obesity in advanced heart failure -- Cardiovascular morbidity and

mortality associated with obesity -- Risk of overweight with the development of heart failure -- Obesity and heart failure -- Obesity phenotypes and their paradoxical association with cardiovascular diseases -- Mechanisms of heart failure with preserved ejection fraction in obesity -- Obesity and cardiovascular diseases -- Obesity and Heart Failure: Possible mechanisms of the Obesity Paradox --Prognosis of morbid obesity patients with advanced heart failure -- BMI as a risk factor for cardiovascular disease -- Relationship between BMI and cardiovascular outcomes in diabetic patients -- Cardiometabolic risk in obese children -- Gender related differences in obesity associated cardiovascular complications -- Understanding the mechanisms and clinical significance of the obesity paradox --Advances in understanding gender difference in cardiometabolic disease risk -- Cardiovascular and Metabolic Complications - Diagnosis and Management in Obese Children -- Obesity and Ventricular Repolarization.

## Sommario/riassunto

Obesity is an independent risk factor for cardiovascular disease (CVD) in adults as well as in obese children. This book will provide a description of the impact of obesity on the cardiovascular system and increased predisposition to CVD. It will identify the major biochemical mechanisms that lead to the occurrence of myocardial abnormalities and vascular alterations in obesity. We will also have some discussion on the biochemistry of the so-called obesity paradox in relation to CVD. The contributors to this book are international experts on obesity and associated cardiovascular complications. This book is also uniquely positioned as it focuses on the biochemistry of obesity-induced cardiovascular dysfunction. There are 20 chapters in 2 different parts in this book, comprising of Part A: Pathophysiology of Cardiovascular Complications in Obesity (11 chapters) and Part B: Modification of Cardiovascular Dysfunction in obesity (9 chapters). The intent of this volume is to provide current and basic understanding of the biochemical mechanisms of obesity induced cardiovascular dysfunction that will be of value not only to cardiologists and other allied health professionals, but will also stimulate and motivate biomedical researchers and scientists to find the way to prevent the epidemic of obesity associated cardiovascular abnormalities. Furthermore, this book will serve as a highly useful resource for medical students, fellows, residents and graduate students with an interest in the cardiovascular system. In summary, this book covers a broad range of biochemical mechanisms of obesity-induced cardiovascular complications. We hope that the reader will understand that obesity is linked to an increase in the risk and occurrence of fatal CVD. Furthermore, the underlying message presented in the book is that the cause of obesity related disorders is complex and that understanding the biochemistry of cardiovascular dysfunction may contribute to the development of novel interventions for the prevention and treatment of obesity associated comorbidities.