



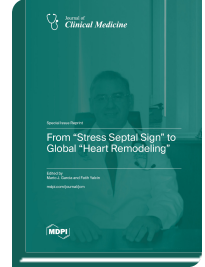
Special Issue Reprint

From "Stress Septal Sign" to Global "Heart Remodeling"

www.mdpi.com/books/reprint/9849

Edited by
Mario J. Garcia
Fatih Yalcin

ISBN 978-3-7258-1845-7 (Hardback)
ISBN 978-3-7258-1846-4 (PDF)



Despite advancements in real-time 3D segmental analysis at the Cleveland Clinic and animal validation studies via third-generation microscopic ultrasound at Johns Hopkins, as well as microscopic remodeling using comparisons of human and animal data at UCSF over two decades, the prevalence and role of LV segmental remodeling and early imaging biomarkers under daily hemodynamic stress remain unclear. Echocardiographers usually prefer single cross-sectional measurements for heart tissue. While basal septal hypertrophy is regular in animals, high stress scores with emotional stress lead to irregularity with tissue heterogeneity (stressed heart morphology, SHM) in humans. Superposed stressors in SHM are adrenergic overdrive, cognitive disorders, and chronic or exercise hypertension, leading to increased mortality. Hemodynamic fluctuations due to blood pressure variability in multiple stressors can be lethal, and enormous SHM may exist in chronic high-stress conditions. Basal septal dominance or SHM could pre-exist chronically before Takotsubo episodes. SHM should be included in clinical protocols to monitor future acute episodes due to hypertension, the main cause of recurrent Takotsubo episodes. An approach to antihypertensive treatment and stress management with comprehensive diagnostic tests is needed. Recording SHM in clinical practice globally could provide a more comprehensive evaluation. Beyond the clinical aspects of SHM, there is a need to focus on cellular levels of myocardial tissue to investigate whether SHM is the specific location of Selye's nonspecific general adaptive response to stressors.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/9849

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.