

Preface



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Guest Editors

Acute heart failure has only recently been recognized as a presentation that is unique within the continuum of heart failure. It is characterized by markedly acute symptom exacerbation, the result of a mismatch between circulatory resistance and inadequate myocardial function to meet the metabolic needs of the corpus. With this new perspective, the literature is only recently catching up to its clinical need. Much of the diagnostic and therapeutic science applied to the acute presentation of heart failure is taken from well-done randomized clinical trials of patients who have chronic heart failure. Emergency Physician Arjun Channmugan once said, "If we don't own acute heart failure, we sure borrow it a lot," which seems to be an accurate characterization. This important distinction emphasizes that, in the acute situation, patients present to the emergency department (ED) when they cannot breathe, and their pathophysiology is not the same as that of the group of patients sitting in an office lobby.

With improvements in the chronic management of heart failure, greater numbers of patients are surviving only to suffer from acute decompensation. This results in a greater need for emergent ambulance transport. The importance of a well-trained emergency medical service system is covered and presented as an outline for other systems to emulate. Once the patient is in the ED, sorting of the undifferentiated dyspneic patient is challenging. The potentially difficult task of accurately diagnosing heart failure is detailed, covering both new strategies and their current controversies. And, as all patients diagnosed with acute heart failure do not require ICU admission or even hospitalization, accurate risk stratification guiding both disposition and therapy selection is detailed.

In this issue of *Heart Failure Clinics*, we also present a historical perspective and overview of the complexities of heart failure pathophysiology. It is pointed out in the issue that heart failure is not a singular entity with a unique cause, and thus its treatment regimens vary greatly. Because the entire developing world is currently confronting a heart failure epidemic, the costs of this entity represent one of the greatest burdens to the entire medical system. We therefore detail the economics of this disease process and engage in a comprehensive discussion regarding the appropriate use of the heart failure observation unit. As the goals of the observation unit are limited, specific acute heart failure treatments are covered. The pharmacology and impact of comorbidities, such as atrial fibrillation, in the total management strategy are addressed.

Additionally, advanced treatments regarding left ventricular assist devices, balloon pumps, pacemakers, internal cardioverter defibrillators, and ultrafiltration are included. This then leads to a separate article covering the difficulties of managing cardiac transplant patients presenting with acute heart failure.

Finally, to a great extent, nursing care drives both in-hospital and postdischarge quality of life in acute heart failure, even more than the pathophysiology of the disease itself. Because of this, we have included an article highlighting the importance of the health team collaboration from the initiation of the patient's care in the prehospital environment, all the way through to discharge planning.

Overall, this issue of *Heart Failure Clinics* has something for almost everyone involved in the spectrum of treating heart failure patients. We hope you enjoy it and we welcome your feedback.

I want to dedicate this book to my beautiful wife Colleen and our three wonderful children Elias, Arel, and Gabriel (J.F.N.).

And thanks to my family, without whom I would get nowhere (W.F.P.).

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