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Series Editor

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Endotoxemia and Endotoxin Shock
Disease, Diagnosis and Therapy

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22 figures, 4 in color, and 10 tables, 2010
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Retraction
“Acute Heart Failure Treatment: Traditional and New Drugs” by Gheorghiade M, Palazzuoli A, Ronco C.
Contrib Nephrol, 2010;165;112-128.
This chapter of a previous volume of Contributions to Nephrology has been retracted at the authors’ request. A miscommunication between the corresponding author and the co-authors resulted in the publishing of an unfinished article.
Several signs and symptoms in sepsis are due to the presence of endotoxin in the circulation. Both in animal and human models there is an evident immunological response to the bacterial invasion of the host and the consequent release of endotoxin into the bloodstream. The presence of endotoxin in the circulation leads to altered cardiovascular function, lung dysfunction and acute kidney injury, often characterizing a clinical picture of sepsis and septic shock. This humoral nature of the syndrome makes it logical to try to remove the circulating endotoxin as much as possible in order to mitigate its biological and clinical effects at the cellular, tissue and organ levels. This can be achieved today with a very specific hemoperfusion process utilizing cartridges with immobilized polymyxin B in an extracorporeal circuit. This approach seems to provide for a significant removal of endotoxin with a significant reduction of its circulating levels.

The basic mechanisms, rationale and the clinical results of this new therapeutic approach are summarized in the present volume. The contributors of this book represent a group of outstanding investigators whose studies have helped expand the scientific knowledge about this field. The clinical effects reported in several chapters demonstrate a mitigation of the septic cascade in the early phases, with amelioration of the prognosis and outcome in septic patients treated with this specific form of hemoperfusion. Recent clinical trials seem to confirm the expectations showing a reduction of mortality in patients with early signs of abdominal sepsis due to recent surgery. This opens new avenues for specific interventions in sepsis and, once more, represents important material for a book in the Contributions to Nephrology series.

We would like to thank the authors and all the contributors for the enormous effort and the quality of their scientific chapters. We also would like to thank all who made this publication possible and especially Karger for the outstanding editorial assistance.
We feel this book will be a milestone in the field of extracorporeal therapies in sepsis and will be a companion for both basic scientists and clinical professionals for their continuous educational improvement.

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