Contributions to Nephrology

Vol. 171

Series Editor

Claudio Ronco  Vicenza
Hemodialysis

New Methods and Future Technology

Volume Editors

Claudio Ronco  Vicenza

51 figures, 5 in color, and 32 tables, 2011
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The Vicenza International Courses are renowned scientific events held in the city of Andrea Palladio. Since 1982 international courses focused on peritoneal dialysis have been held every 3 years, featuring an outstanding faculty and gathering participants from numerous countries. Starting in 1998, the theme of critical care nephrology has also been covered every 3 years, leading to the most comprehensive review in the field of intensive care nephrology. The third theme of the Vicenza Courses is hemodialysis. This course is also held every 3 years. The course on hemodialysis is a collaborative effort with industry leaders. A series of lectures and panel discussions are held during the days of the course. A unique aspect of the course is the debates between leading experts on controversial subjects. The course includes contributions from well-recognized international experts. Participants for the course come from all over the world, providing a rich environment to discuss how best to care for patients with kidney disease.

In 2002, the first edition of the course compendium focused on hemodialysis technology, while in 2005, attention was placed on the clinical aspects of hemodialysis. Each course is also preceded by a lecture series devoted to the theoretical basis of hemodialysis. During the meeting, special recognition is always assigned to a distinguished scientist who has made outstanding contributions to the field.

In 2008, the main theme of the International Vicenza Course on hemodialysis was the importance of cardiovascular complications in dialysis. On that occasion, the course was held in conjunction with the first international congress of the International Society for Hemodialysis (ISHD). This joint venture for the education and dissemination of science in dialysis between Vicenza and ISHD was continued in October 2010 with a special conference on wearable, portable and miniaturized devices for hemodialysis and ultrafiltration. During this meeting, the most important advances concerning the development of the wearable artificial kidney were presented by leading experts from around the world.

The year 2011 brings forth another outstanding International Vicenza Course on hemodialysis. The 20th Annual International Vicenza Course on Hemodialysis includes another exceptional group of speakers, and we are excited that this volume of *Contributions to Nephrology* will compile the material presented in the conference. The Vicenza course also celebrates international collaboration in the care of patients with kidney disease. In 2009, a research and educational collaboration between the International Renal Research Institution in Vicenza and the University of Virginia in Charlottesville was conceived. In the years since this collaboration began, numerous manuscripts have been published and this volume continues that spirit of collaborative research. This edition combines the contributions of this year’s course together with some other contributions from the special conference on wearable devices. The main themes covered are the cardio-renal syndromes, new technologies in hemodialysis, new
dialysis membranes and dialysis techniques, the importance of vitamin D receptors in renal and extrarenal physiology, the control of risk factors such as blood pressure and lipid disorders, and finally, a special interest is placed on new models of organization including large dialysis networks and healthcare economics. Acute kidney injury and its impact on the subsequent development of chronic kidney disease are also discussed together with the use of modern biomarkers.

We believe this publication will be a useful supplement to the lectures presented at the 3-day Vicenza course, as well as a useful tool for future consultation by clinicians and all who are involved in the care of patients with end-stage kidney disease. We truly appreciate the help of the members of the faculty who have made this edition possible.

We give our sincere thanks to Anna Saccardo, Marta Scabardi and Ilaria Balbo who worked in Vicenza on the final arrangement of the course. A special thanks to Karger for the usual outstanding quality of the publication.

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