

Respiratory Care of Patients With “Other” Conditions

For more than 20 years the New Horizons Symposium has focused on some important theme at the International Respiratory Congress of the American Association for Respiratory Care. The 21st Annual New Horizons Symposium was presented in San Antonio, Texas, on December 4, 2005. The title of the symposium was “Respiratory Care of Patients With ‘Other’ Conditions.” Papers prepared by the symposium speakers are published in this issue of *RESPIRATORY CARE*.

Much of respiratory care focuses on common pulmonary disorders such as asthma and chronic obstructive pulmonary disease, on important, if less common, diseases such as cystic fibrosis, or on common circumstances such as acute respiratory failure. However, the care of patients with *other* pulmonary disorders or diseases that primarily affect other organ systems may involve respiratory therapists (RTs) in assessment and management. The purpose of this symposium was to review the important features of some such conditions from the perspective of respiratory manifestations, interventions, and complications.

RTs are commonly involved in the care of patients with acute brain injury. Accordingly, RTs must be knowledgeable of topics such as the physiology of cerebral autoregulation and how this is disrupted in acute brain injury. From a respiratory-care standpoint, approaches to management, such as control of intracranial pressure, have changed in recent years. Ventilator management and other aspects of the respiratory care of these patients can have an important impact on the clinical outcomes of these patients. This is reviewed by Steven Deem from the University of Washington Harborview Medical Center, Seattle, Washington.

With the recent availability of inhaled gases that are pulmonary vasodilators (eg, nitric oxide) and aerosols that are pulmonary vasodilators (prostacyclins), RTs are increasingly involved in the care of patients with pulmonary arterial hypertension. This demands knowledge of the pathophysiology, possible causes, and clinical presentation of pulmonary hypertension. This is presented by Deborah Jo Levine of the University of Texas Health Science Center, San Antonio, Texas.

RTs may encounter patients with idiopathic pulmonary fibrosis in the out-patient setting and in the inten-

sive care unit. Accordingly, it is important to appreciate the pathological, clinical, laboratory, and epidemiological characteristics of idiopathic pulmonary fibrosis, along with its natural history and current approaches to treatment. This is addressed by Maria Angela C Hospenthal of the University of Texas Health Science Center, San Antonio, Texas.

Lung transplantation has become an option in appropriately selected patients with end-stage pulmonary disease. RTs are involved in the preoperative and postoperative care of these patients. Therefore, it is important for RTs to know the current indications for and outcomes of lung transplantation. Moreover, it is important for RTs to appreciate the unique characteristics of the post-transplant patient, in terms of clinical findings, imaging, pulmonary function tests, and complications. This is reviewed in the paper by Stephanie M Levine and Luis F Angel, both of the University of Texas Health Science Center, San Antonio, Texas.

Although congestive heart failure often presents with respiratory symptoms and may be mistaken for chronic obstructive pulmonary disease, its pathophysiology and manifestations are different. This can be demonstrated by bedside imaging and pulmonary-function assessment. RTs are increasingly involved in the care of these patients, particularly with the application of continuous positive airway pressure via face mask and noninvasive positive-pressure ventilation. The respiratory aspects of management for congestive heart failure are summarized by Michael S Figueroa and Jay I Peters, both of the University of Texas Health Science Center, San Antonio Texas.

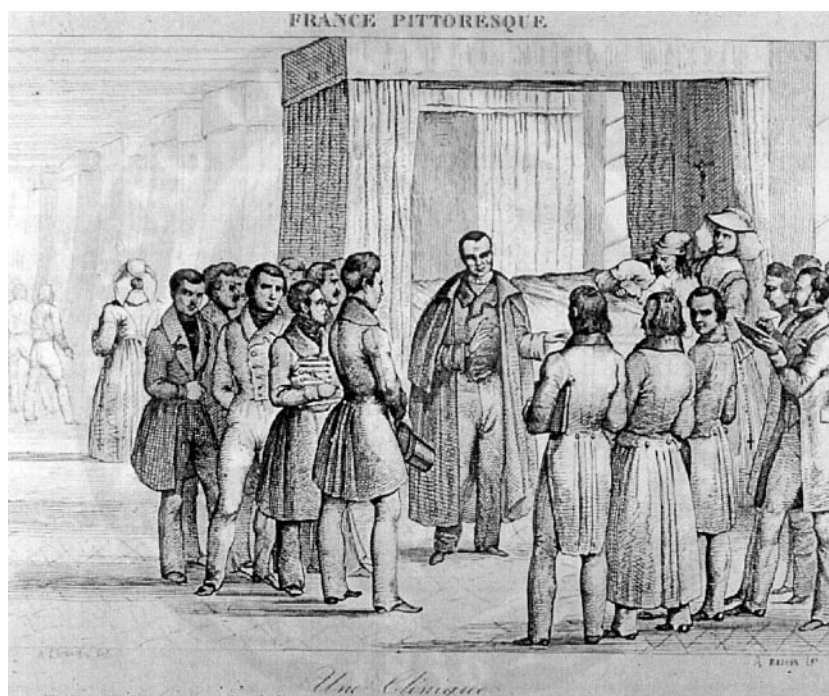
Both acute and chronic renal failure affect the respiratory system. Similarly, therapies for renal failure may impact respiratory function. The paper by David Pierson of the University of Washington Harborview Medical Center, Seattle, Washington, reviews the respiratory manifestations of renal failure and the ways in which RTs may be involved in the care of patients with this condition.

We, the readers of *RESPIRATORY CARE* journal, are indebted to these author-clinicians for preparing these succinct reviews of the care of patients with “other” condi-

tions, with particular emphasis on the implications for RTs. With the expanding role of RTs, it becomes increasingly important to understand the respiratory-care implications of conditions such as acute brain injury, pulmonary arterial hypertension, idiopathic pulmonary fibrosis, lung transplantation, congestive heart failure, and renal failure. Armed with this knowledge, the RT is better equipped to tackle the complexity of care demanded by these conditions.

Dean R Hess PhD RRT FAARC
Harvard Medical School and
Massachusetts General Hospital
Boston, Massachusetts

Jay I Peters MD FAARC
Division of Pulmonary Diseases/Critical Care Medicine
University of Texas Health Science Center
San Antonio, Texas



Interior view of a hospital ward: A physician is addressing a group of students at a patient's bedside. A Masson, from Alexandre Lacauschie, *Une Clinique*, France 1833-1846? Courtesy National Library of Medicine