Respiratory medicine: Increasing demands

Louis-Philippe Boulet MD, *President, Canadian Thoracic Society*

From the time that tuberculosis was considered one of the most important respiratory diseases in Canada until the beginning of this new millennium, the field of respiratory health has changed markedly and should continue to change at an even faster pace in the coming decades. Indeed, further changes are expected as aging 'baby boomers' increasingly require medical services for respiratory conditions. A recent study published in the *Journal of the American Medical Association* (1) estimated a shortfall of pulmonary specialist time by the year 2007, rising to 35% by 2020 and 46% by 2030.

From the Canadian scene, the report by Cockcroft and Wensley (2) in the *Canadian Respiratory Journal* on respirology manpower in Canada estimated the current deficiency in respirology manpower to be from 10%, based on a recommendation from the Royal College of Physicians and Surgeons of Canada, to 50%, based on other data, such as waiting lists for pulmonary problems. This percentage may certainly increase in the next few years unless more respirologists are trained.

Of course, a large part of respiratory care is provided by general practitioners, internists, allergists and pediatricians. However, in regard to the major changes that will occur in our population in the next few years, specialists will not only have to respond to the increasing demand for acute and chronic care but will also have to devote significant time and energy to other tasks, such as reviewing the exponential increase in research data, translating those data into recommendations for current care in the form of consensus guidelines and taking part in initiatives developed to find innovative ways of delivering care. It becomes more important than ever to elaborate effective means to determine the population needs and current care gaps, and to allow resources to improve the situation.

On another note, two new committees of the Canadian Thoracic Society have recently been formed: the Pulmonary Vascular Diseases Committee and Sleep Apnea Committee will be chaired by Dr Robert Levy and Dr Douglas Bradley, respectively. These two fields of respiratory medicine have evolved quickly in the past few years, with Canadian researchers and caregivers making a strong contribution.

Pulmonary vascular diseases affect a significant proportion of the population, and the treatments for affections such as primary pulmonary hypertension have evolved rapidly. An increased interest in the area of pulmonary vascular diseases is largely the result of major advances in the application of new, basic science discoveries in the clinical arena. Exciting developments are being made in the area of medical therapy for pulmonary artery hypertension – both primary and secondary – with parenteral and inhaled prostaglandins, chronic nitric oxide and oral endothelin-receptor antagonists. Specific antifibrotic therapy and gene therapy are likely to be used in human trials within the next three to five years. There are also important new approaches to the surgical management of pulmonary hypertension in chronic central thromboembolic disease and to other intervention methods, such as atrial septostomy. New developments in the field of thrombosis are also taking place.

Sleep-related disorders are increasingly being recognized as a major health problem requiring more and more health resources. Studies on sleep apnea syndrome (SAS) report a prevalence of the disease from 0.2% to 5% in subjects between 30 and 69 years of age. The annual cost of this disorder and its treatment in the United States is evaluated at more than US$15 billion. Increased recognition of SAS has led to increasing demands for investigation in specialized centres, generating long waiting lists. Considerable research is being done on the pathophysiology of SAS and therapeutic alternatives.

It was, therefore, mandatory to give these two fields of respiratory medicine the place they deserve in our society, and we look forward to the initiation of activities within them.

REFERENCES

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