

Dyspnea: an update Dispnea: un aggiornamento

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Our understanding of the nature and mechanisms of dyspnea has greatly evolved over the last two centuries. Although the relationship was never formally specified, discomfort was always assumed to accompany respiratory muscle activity. Hypotheses and theories of dyspnea thus became synonymous with the factors controlling the extremes of respiratory muscle activity, with expiratory muscle activity and discomfort now being known to be controlled by the same factors. In his introduction to the "Breathlessness symposium" held in Manchester (1966), Julius H. Comroe [1] predicted that none of the speakers would deal directly with dyspnea: instead they would present only what they understood - the control of breathing, a circumstance in which dyspnea may occur. In the event Comroe was largely right. Few contributors dealt with sensory aspects of the subjects, and what sensory physiology there was, was naïve.

In the 25 years following that symposium, things changed greatly, as the contributions to the Moran Campbell Symposium held in Hamilton (1991) [2] testified. Both investigators and clinicians had by then adopted the approach of sensory physiology and the methods of psychophysics. Also, the main related topic concerned the respiratory muscles rather than breathing control. The influence of both these two changes on the Moran Campbell Symposium was central.

Dyspnea is a very common symptom in patients

with respiratory disorders. It presents major challenges to the medical community, so that clinicians and scientists need to keep a constant focus on the advances being made to overcome this problem.

While a full account of the major challenges is not possible in this single issue, we wish to contribute to keeping pneumologists abreast of at least part of the considerable progress that has been made in recent years in the understanding of the pathophysiology, diagnosis, and therapeutic management of patients with both obstructive and restrictive pulmonary disease. This Multidisciplinary Focus reviews some recent progress in the field of dyspnea. Four distinguished experts present the best of their own work and review the present knowledge regarding health and disease. The integrated approach present in this collection of reviews "is designed to explain and inform and in fact to inspire those who wish to serve dyspneic patients better than ever before". I wish to thank the authors for their willingness to contribute to this update on dyspnea. Their expertise has allowed the publication of this focus on current concepts related to the evaluation and treatment of dyspnea.

A final word of cordial thanks to *Multidisciplinary Respiratory Medicine* for publishing this special Focus devoted to dyspnea. I am confident that the readers will appreciate the efforts of those involved in this undertaking.

References

1. Comroe JH Jr. Some theories of the mechanisms of dyspnoea. In Howell JBL, Campbell EJM, eds. *Breathlessness*. Oxford: Blackwell Scientific, 1966:1-5.
2. Jones NL, Killian KJ, Eds. *Breathlessness: The Campbell Symposium*, Hamilton, ON: CME, 1992:122.

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