Claudia C. Dobler[1,2]

cdobler@bond.edu.au
@ClaudiaCDobler

Editorial

Oxygen

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Oxygen is on the World Health Organization's List of Essential Medicines, which includes the most efficacious, safe and cost-effective medicines for priority conditions. It is one of the most commonly used treatments in hospitalised patients, yet the evidence on its optimal use to improve clinical outcomes and reduce possible harm is relatively sparse. Oxygen should be prescribed like any other medication, for a specific indication, with a specific dose and with monitoring of the therapeutic response, but prescribing practices are often poor, increasing the risk of an adverse outcome.

In this issue we have a number of contributions on the topic of medical oxygen. One Journal Club article summarises and discusses the EOLIA trial, which aimed to assess whether patients with severe acute respiratory distress syndrome benefit from early initiation of venovenous extracorporeal membrane oxygenation (ECMO) [1]. The study showed no significant difference in mortality at 60 days in patients on ECMO compared with patients on conventional mechanical ventilation. However, a relatively high rate of 28% of patients in the control group crossing over to ECMO may have skewed the results in the intention-to-treat analysis. A second Journal Club article reports a multicentre trial that examined whether high-flow oxygen reduces escalation of care in infants with hypoxaemic bronchiolitis [2]. Treatment failure leading to escalation of care was reduced in the group that received high-flow oxygen therapy compared with the group that received standard oxygen therapy. The Lung Function Corner article describes the physiological responses in a patient with COPD breathing heliox or oxygen during exercise [3]. The authors conclude that heliox and oxygen administrated during rehabilitative exercise might result in greater functional and clinical benefits compared with exercise conducted while breathing room air if an increased training intensity is achieved, but not if the training intensity remains unchanged. The European Lung Foundation and the European Industrial Gases Association AISBL collaborated on an article that provides practical tips on air travel for people requiring oxygen therapy [4]. Furthermore, we hear from a patient about what it means to live with medical oxygen and how life can still be lived to the fullest despite disease- and treatment-related limitations [5]. Additional articles on oxygen will be made available as online exclusives on the *Breathe* website (https://breathe.ersjournals.com).

Other highlights in the September issue are an article on hot topics and current controversies in community-acquired pneumonia (CAP) [6] and a review of diagnostic imaging results in non-cystic fibrosis bronchiectasis [7]. The article on CAP examines the role of biomarkers to guide diagnosis and treatment of CAP, optimal antibiotic choice, the role of corticosteroids, association of CAP with subsequent cardiovascular risk, and the concept of healthcare-associated pneumonia [6]. The bronchiectasis article provides a concise overview of computed tomography findings in non-cystic fibrosis bronchiectasis in adults [7].

I would like to thank all the contributors to this issue who have given their time and shared their expertise, as well as the editorial team.

I look forward to seeing you at the ERS International Congress in Madrid!

CrossMark

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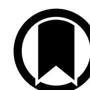
The September issue of *Breathe* focuses on medical oxygen http://bit.ly/2M83NLo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Affiliations

Claudia C. Dobler[1,2]

[1]Institute for Evidence-Based Healthcare, Bond University, Robina, Australia. [2]Dept of Respiratory Medicine, Liverpool Hospital, Sydney, Australia.

Conflict of interest

C.C. Dobler has nothing to disclose.

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