Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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EDITORIALS

A special issue on respiration and the airway: critical topics at a challenging time

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> *Car il savait …, que le bacille de la peste ne meurt ni ne disparaît jamais, …, et que, peut-être, le jour viendrait où, pour le malheur et l'enseignement des hommes, peste réveillerait ses rats et les enverrait mourir dans une cité heureuse*. (Albert Camus, *La Peste*, 1947)
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> *He knew … that the plague bacillus never dies or disappears for good; that it can lie dormant for years and years …; and that perhaps the day would come when, for the bane and the enlightening of men, it would rouse up its rats again and send them forth to die in a happy city*. (*The Plague*, translation by Stuart Gilbert)

This Special Issue of the *British Journal of Anaesthesia* (*BJA*) on 'Respiration and the Airway' follows on from the second World Airway Management Meeting, held in the beautiful Beurs van Berlage building in Amsterdam, November 13–16, 2019 (WAMM 2019). Hosted by the Difficult Airway Society (DAS), Society of Airway Management (SAM), and European Airway Management Society (EAMS), and supported by 30 international airway groups, the conference presented a world-class programme of internationally renowned experts in the field of airway management. The WAMM 2019 attracted 1804 delegates from 70 countries, and included 52 lectures, multiple workshops, and 523 presented abstracts, some of which are collected in this Special Issue.[1,2] The success of the meeting led to a call for papers in the Autumn of 2019. We received many drafts from around the world, which underwent our rigorous peer review process, resulting in the collection of more than 10 articles published here. Since the *BJA* is the affiliated journal of the WAMM, this issue also contains the top 30 abstracts selected by a panel of experts at WAMM 2019. Together, these articles have been made freely available to all readers immediately upon publication, and they provide essential information for the safe practice of respiratory and airway management.

The *BJA* recognises that current strategies for airway management are still not ideal in many areas,[3–5] and has long supported the activities of societies dedicated to airway management.[6] This includes the publication of several influential studies and guidelines on airway management.[7–9] We also launched our first Special Issue on Airway Management in 2016,[10] which followed the first WAMM held in Dublin in 2015. This issue reviewed current problems associated with airway

management and provided evidence-based preventative and treatment methods to reduce life-threatening complications associated with airway management.

Since publication of the first Special issue on Airway Management,[10] there have been considerable developments in equipment, strategies, and training methods for airway management.[11–14] There has also been increasing attention to developing effective airway and respiratory management approaches outside the operating room.[5,15–19] A notable project addressing this area is the Project for Universal Management of Airways (PUMA; https://www.universalairway.org), which aims to produce a set of principles that reflect a consensus of existing published airway guidelines that can be applied to all episodes of airway care, across boundaries of geography, clinical discipline, and context. The concept, methodology, and the progress of this project were presented at WAMM 2019. This project could only be achieved through international collaboration of experts on airway management and interdisciplinary collaboration as represented at WAMM 2019 and within this Special Issue.

This Special Issue contains new findings regarding effective airway management during anaesthesia and in critically ill patients, including technical strategies for the 'cannot intubate, cannot oxygenate' (CICO) scenario.[20–26] Attention to the role of cognitive psychology in improving management and training is provided.[2] Additional articles address respiratory management, in particular as it relates to postoperative pulmonary complications and drug-induced respiratory depression.[27–29]

In the course of preparing this Special Issue, the world was overcome with an enormous challenge: the COVID-19 global pandemic. Toward the end of 2019, China alerted the World Health Organization to several cases of an unusual pneumonia in Wuhan, Hubei province, possibly caused by an unknown virus. Early in 2020, a new virus (initially named 2019-nCoV, now changed to SARS-CoV-2) was identified as belonging to the coronavirus family, which includes severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV). The virus has spread globally, and in March, the WHO declared the coronavirus outbreak a global pandemic. A month after the outbreak in Wuhan, the death toll in China surpassed that of the SARS epidemic in 2002–2003, and the death toll continues to increase. It is now clear that patients infected with this new virus (coronavirus infectious disease-2019, or COVID-19) frequently require advanced respiratory support, including noninvasive and invasive ventilation. This novel coronavirus is highly contagious, putting people who perform airway management and other aerosol and droplet generating procedures at a high risk of infection without proper protection. Thus, airway experts are in the midst of one of the most challenging scenarios in the history of difficult airway and respiratory management.

As a consequence of the WAMM meeting in 2019 and the collaborations that were established, anaesthetists with a particular interest in airway management from across the globe have been working together to confront this challenge. This has led to a greater understanding of the complexities of airway management and ventilation in patients with COVID-19. Many groups are now working together to establish best practice guidelines and research to improve the management of this challenging group of patients. In addition, the concept of an Airway Lead network (https://www.niaa.org.uk/NAPAirwayLeads#pt)[30] is being adapted worldwide. The benefits of this network have been recognised across the UK with almost 97% of NHS hospitals now having airway leads. Ireland and New Zealand have also established networks, whilst they are in development in Australia, Canada, and the USA. The specific function of airway leads will vary slightly depending on the locale, but involves co-ordination of personnel, training, and equipment with respect to airway management across the institutions.

In response to the COVID-19 crisis, the *BJA* has been facilitating rapid dissemination of relevant information through a new monthly feature in the *BJA* known as *COVID-19 and the anaesthetist: a special series*. A special collection has also been created on the *BJA* website (bjanaesthesia.org/COVID-19-and-the-anaesthetist) to make all publications on the topic appearing in the *BJA* easily accessible in an effort to disseminate rapidly such information to our international audience. This includes our growing body of articles related to COVID-19 involving patient care, research, opinion, and practical experience from around the world. Articles undergo expert peer review and rapid publication though our Advance Access feature in preprint form (bjanaesthesia.org/inpress). As a result of this timing, this Special Issue includes several reports related to topics such as infection prevention during airway and respiratory management,[31–34] and effective oxygenation methods in patients with COVID-19.[35 36] A review article by Odor and colleagues[37] succinctly summarises how SARS-CoV-2 has spread globally, relevant personal protective equipment (PPE) policies, and the risk of transmission by and to medical staff. A report of the extensive early experience with airway management carried out in Wuhan is presented, together with consensus recommendations developed by a panel of international experts on airway management.[38]

This Special Issue of the *BJA* on Respiration and the Airway provides critical practical information for the practice of anaesthesia and critical care, which has special significance in the era of COVID-19. A collection of high-quality articles involving international collaborations in the areas of airway and respiratory management summarises the state of the art, and includes a number of late-breaking publications focusing on the COVID-19 global pandemic. The *BJA* continues to welcome submissions in the areas of airway management and respiration, which are featured in a regular section of the *Journal*, including special issues on the topic[10] such as this one. We are fully committed to serving the science and practice of airway and respiratory management for the benefit our international audience and our patients. The critical importance of this role in advocating for the submission and dissemination of high-quality research and clinical guidance in critical care, respiration, and airway management has been highlighted by the current global pandemic. Our commitment to supporting the critical role that anaesthetists play in the international response to this and other acute respiratory syndromes is on full display here. It is our sincere hope that the information included in this Special Issue will benefit our readers and their patients.

Authors' contributions

Wrote, edited, and approved the final version: all authors.

Declarations of interest

TA is co-editor of this Special Issue on Airway Management, and editor of the *British Journal of Anaesthesia, Journal of*

Anesthesia, and *JA Clinical Reports*. EPO is co-editor of this Special Issue on Airway Management, and a chairperson of the World Airway Management Meeting 2019. HCH is editor-in-chief of the *British Journal of Anaesthesia*.

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Evaluating interventions to reduce the risk of postoperative delirium

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This editorial accompanies: Restricted *versus* liberal intraoperative benzodiazepine use in cardiac anaesthesia for reducing delirium (B-Free Pilot): a pilot, multicentre, randomised, cluster crossover trial by Spence et al., *Br J Anaesth* 2020:125: 38–46, doi: 10.1016/j.bja.2020.03.030

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Postoperative delirium is a form of acute brain dysfunction that sits on a spectrum of perioperative neurocognitive disorders, manifesting within 30 days of surgery.[1] There are acute and fluctuating disturbances in attention and awareness, with hyperactive (agitation), hypoactive (inactivity), and mixed forms.[2] Delirium is distressing to patients and their families, an extra burden for healthcare workers, and is associated with increased healthcare costs.[3] Postoperative delirium is also associated with a decline in both cognitive and functional performance in the weeks to months after surgery.[4,5]

Postoperative delirium is estimated to occur in up to 65% of older patients after surgery,[6,7] but the reported incidence is highly dependent on how it is diagnosed and screened.[1] The Confusion Assessment Method for the ICU (ICU-CAM) is a widely used tool validated in the ICU setting that identifies delirium on the basis of an acute change or fluctuating course of mental status plus inattention and either altered level of consciousness or disorganised thinking.[8] ICU-CAM should ideally be administered by trained staff, twice a day, for at least 5 days after surgery if wanting to detect all delirium cases.[9,10]

Risk factors for delirium include advanced age, comorbidity, extent of surgery, and postoperative pain.[10–12] Most risk factors are non-modifiable so there has been great interest in evaluating potential preventative measures or treatments. But with the possible exception of dexmedetomidine,[13] there is no convincing evidence that pharmacological prevention or