

As Victoria is caught in the grips of a second wave of coronavirus disease 2019 (COVID-19) and its impact worldwide continues to expand, this issue of *Critical Care and Resuscitation* is inevitably affected by it as well. Thus, several articles in this issue focus on key aspects of the COVID-19 pandemic. One such aspect is the potential to use home ventilators to support critically ill patients should the system be overwhelmed or should COVID-19 affect middle-income countries where the number of ventilators available is insufficient.<sup>1</sup> If patients receive invasive ventilation, what is their treatment and mortality and what are the causes of death? This question is answered by Zangrillo and colleagues<sup>2</sup> in a large case series from Milan — the epicentre of the COVID-19 pandemic in Italy. Another key COVID-19-related issue is the protection of health care workers in the intensive care unit (ICU) from aerosol generating procedures. The article by McGain et al<sup>3</sup> describes a novel approach to ensuring protection under such circumstances. Media outlets all over the world have focused on scattered reports that the prevalence of smoking is lower than in the general population among patients who are admitted to the ICU, suggesting that nicotine inhalation may be protective from severe COVID-19. Two reports in this issue of *CCR*, one from Italy and one from Australia, provide contradictory findings,<sup>4,5</sup> thus leaving the issue unresolved. The issue of how best to communicate with families under the stress associated with having a loved one in intensive care is tackled in two articles. The first provides a primer on how best to approach such communication.<sup>6</sup> The second provides data from a successful demonstration study utilising standard messages, transmitted from computer to mobile telephone, informing patients' families of key steps in the post-cardiac surgery journey.<sup>7</sup> Such messages proved extraordinarily popular among families and this study opens the door to greater use of rapidly improving communications technologies in the ICU. Intensive care clinicians are increasingly exposed to the use of novel oral anticoagulants, with both their risks

and benefits. In a focused review relevant to intensive care, Willcox and colleagues<sup>8</sup> present the key pharmacological features, indications and usage of such agents. Previous studies have associated the pre-morbid use of aspirin with better outcomes in patients with sepsis. However, it is unclear whether treatment with aspirin in patients with systematic inflammation can affect the biology of such inflammatory response and, in particular, modify the lipid metabolome (inclusive of thromboxane, prostaglandins, protectins and defensins). In a pilot study, Cioccarri et al<sup>9</sup> provide a detailed picture of such a complex system and its response to both inflammation and aspirin therapy. The presentation of patients with a subarachnoid haemorrhage who have experienced a cardiac arrest is often seen to portend a universally abysmal outcome, but this may not be entirely accurate, as reported by Heaney and colleagues.<sup>10</sup> Limb movement can tell us a great deal about patients. In ICU, it can help predict the imminent awakening from sedation and/or the imminent onset of delirium. Using the technique of accelerometry, Weeden and colleagues<sup>11</sup> provide the first systematic and detailed minute-by-minute analysis and present some novel and important insights. Finally, although the use of low-dose steroid therapy in septic shock has been studied in a very large trial conducted mostly in Australia and New Zealand, the use of steroids in septic shock remains a matter of controversy. Further fuel is added to such controversy by a detailed analysis of their cost-effectiveness,<sup>12</sup> which challenges whether they provide "value for money". As reflected in the associated editorial,<sup>13</sup> the complexity of determining "value" remains subject to the terms of assessment and to the ripples of a specific action on the system of care. As usual, evidence is only translated into practice through the imperfect sieve of human judgement.

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