

Unwelcome guests: infectious disease beyond the pandemic

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Infectious diseases (ID) remain a significant burden to health and society. The increased mobility of people and goods has contributed to the persistent and ever-changing impact of ID. Over a third of general practice consultations in adults are for ID, while there has been a four-fold increase in hospitalisations for ID over the last 30 years in the UK. These data are separate to the impact of COVID-19. In this edition of *ClinMed*, there is a strong focus on ID in general, including COVID-19.

A range of therapies have been approved in the UK for hospitalised and non-hospitalised patients with COVID-19. In particular, the development of neutralising monoclonal antibodies (nMABs) and novel antivirals represent an expansion of therapies both to reduce hospitalisation rates as well as mortality. Mehta *et al* summarise these advances in a concise review, relevant to clinicians managing patients with COVID-19, whether in community or hospital settings.¹ In a fast-moving field, a paper like this risks becoming out of date, but this update is based on publications from NHS England and the World Health Organization, and provides important practical guidance.

Kassif Lerner and colleagues in Tel Aviv describe a retrospective analysis of patients admitted to critical care during the height of the COVID-19 pandemic.² Consistent with previous studies, they identify that thrombocytopenia and coagulation disorders were seen in patients with greater disease severity and higher mortality. A new finding was the greater than expected incidence of heparin-induced thrombocytopenia (HIT), especially in those with severe COVID-19 presentations. As many COVID-19 patients require aggressive thromboprophylaxis, further understanding of HIT and appropriate protocols are essential. The paper also speculates on the immune disruption that may be a part of the pathophysiology of this presentation.

A paper from Bawa *et al* details the successful implementation, and improvement of a COVID-19 vaccination protocol for inpatients in a UK hospital.³ Vaccination remains a critical measure in protecting individuals from developing severe COVID-19. Inpatients represent a population that often includes vulnerable individuals who may have comparatively limited access to vaccines. With the recommendation of a fourth dose of a vaccine for more vulnerable individuals, and the potential for future variants of concern, there will be an ongoing need to vaccinate patients against COVID-19. Administration of timely vaccine doses to this population is especially important, and the manuscript identifies a simple implementation protocol to deliver this. The authors signpost to the potential to use similar processes to vaccinate inpatients against other diseases, such as seasonal influenza.

Antimicrobial resistance is a well described and increasingly prevalent problem that has resulted in the development of a wide range of approaches to tackle it. Roy-Bentley *et al* describe a project to implement the Antimicrobial Review Kit to provide

a simplified approach to rationalise antibiotic decision-making.⁴ They focus on three standardisable actions and measures: use of the decision tool (a communication tool of infection diagnosis certainty/uncertainty), evidence of a pre-72-hour antibiotic review and pre-72-hour antibiotic cessation rates. The challenges of changing prescribing behaviour are emphasised.

This month's CME section features superb updates on monkeypox, meningitis, sepsis-associated encephalopathy and infections in people who inject drugs.^{5–8} The content is topical, intensely practical and state of the art for those undertaking postgraduate exams.

A final paper I would like to draw your attention to is from Peerally and colleagues.⁹ Standardisation of serious incident investigations is of vital importance in improving patient safety. The paper provides an evidence base and standard framework for this using a methodology known as the Human Factors Analysis and Classification System. Originally used in aviation, it is a tool to understand the underlying causal factors that lead to an incident, rather than seeking to ascribe blame. The manuscript breaks down unsafe acts into error types and the manuscript is illustrated with examples to describe causative factors. There is a huge amount to learn about clinical process in this highly recommended paper. ■

Anton Emmanuel
Editor-in-chief

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