Advanced life support should be taught early

Sir,

Prout and Nolan (vol 70(8), 2009, M123) provide a comprehensive summary of the current advanced life support resuscitation protocols.

From the first day of practicing medicine, newly qualified doctors have to tackle the clinical scenarios described within these guidelines. A significant number of trainees will not yet have attended advanced life support (Nolan, 2006) or similar training courses (immediate life support (Soar et al, 2003) or acute life-threatening events – recognition and treatment; www.alertcourse.com). These courses are valuable for developing the skills in recognizing and managing critically ill patients which are first acquired as students.

The Foundation Programme (2007) has acknowledged the importance of this qualification, by ensuring that an advanced life support provider certificate is obtained to successfully complete the 2-year programme. Having recently completed advanced life support, I feel the skills gained from the course would have been particularly useful in the initial months of working as a doctor. The Foundation Programme curriculum ought to go further by recommending advanced life support as mandatory within the first few weeks of the first foundation year, or even in medical school.

Difficulties in implementing this may arise as deaneries and NHS trusts continue to tighten training budgets. Such cutbacks must not impact on the provision of relevant and current skills for new doctors. The Resuscitation Council (UK) (2009) have attempted to address the dilemma with investment in delivering cost-effective and efficient teaching through e-learning. This reduces the time that NHS staff are absent from clinical practice, with quality of training preserved within a standardized curriculum.

Piloting of e-advanced life support courses should be encouraged to assess outcomes of this new method of teaching, while individual trusts and deaneries must accept that resuscitation skills is an area where a decline in training cannot be accepted.

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Thromboprophylaxis and heparin-induced thrombocytopenia

Sir,

To address the immunohaematological problems of the use of low molecular weight heparin (vol 70(11), 2009, p. 630), the selective factor Xa inhibitor, fondaparinux, must be considered the antithrombotic agent of choice for many of the conditions in which low molecular weight heparin is currently indicated. Fondaparinux is virtually free of the risk of thrombocytopenia and procoagulant activity (Grouzi et al, 2009). Fondaparinux compares favourably with low molecular weight heparin for effective, safe prophylaxis against venous thromboembolism, as shown by a pooled analysis of data from eight trials comparing fondaparinux with either low molecular weight heparin (five trials) or placebo (three trials) in medical and surgical patients. There was a 'consistent pattern of reduced mortality in patients treated with fondaparinux irrespective of whether patients experienced major bleeding or no major bleeding' (Eikelboom et al, 2009).

This outcome was also consistent with the observation that, as an adjunct to thrombolytic treatment of ST segment elevation myocardial infarction, the use of fondaparinux instead of placebo reduced mortality and re-infarction without a significant increase in bleeding and strokes (Yusuf et al, 2006).

Notwithstanding the rare occurrence of fondaparinux-related thrombocytopenia, either subsequent to heparin-induced thrombocytopenia or in the management of a heparin-naïve patient, another emerging indication for fondaparinux is as a bridging agent between heparin and oral anticoagulants in patients who have experienced heparin-induced thrombocytopenia. Grouzi et al (2009) documented unqualified success using fondaparinux in 21 out of 22 patients who had experienced heparin-induced thrombocytopenia, 14 of those patients having also experienced thrombotic complications of heparin-induced thrombocytopenia. The use of fondaparinux led to the platelet count reverting to normal within 1–9 days in all 22 patients, and the subsequent implementation of oral anticoagulant therapy was successful in 21 patients (one patient died from unrelated causes).

This comes in the wake of the grade 2C recommendation in the American College of Chest Physicians evidence-based guidelines that fondaparinux should be listed among the non-heparin anticoagulants that could be used 'for patients with strongly suspected (or confirmed) heparin-induced thrombocytopenia, whether or not complicated by thrombosis' (Warkentin et al, 2008).

For the sake of completeness, one must note that pentosan polysulfate, a heparin analogue widely used to treat interstitial cystitis, is also prone to immunohaematological complications such as thrombocytopenia and procoagulant activity, the latter exemplified by a case of superior sagittal sinus thrombosis (Tardy-Poncet et al, 1994).

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