Clinical and scientific letters

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Central lines and the general medical registrar – time for a change in the curriculum?

A decade ago, central venous catheter (CVC) insertions were a routine feature of a junior doctor's daily workload. Times have changed. Today, while many procedures remain well within the remit of the general medical registrar, CVC insertion has become less practised. CVC insertion is a procedure with widely-recognised, life-threatening risks, including pneumothorax, arterial puncture and serious bloodstream infections. The hazards of CVC insertion have led to numerous safety alerts being issued, including one from the Royal College of Anaesthetists in 2015, ¹ and guidelines from the National Institute for Health and Care Excellence (NICE) recommending the use of ultrasound guidance to improve safety in this procedure. ²

In order to minimise the risk of complications, and underpinned by concerns for patient safety, the responsibility for the majority of CVC procedures has shifted in recent years to experienced teams – anaesthetics, intensive care or nephrology – who maintain their competency with regular practice. Thus, the procedure is now concentrated among fewer highly skilled technicians doing multiple lines per week, rather than spread across many less skilled technicians doing few procedures each.

The majority of general medical registrars do not perform CVC insertion as part of their specialty work and are becoming de-skilled as a consequence. However, CVC insertion remains firmly enshrined within the remit of the general medical registrar in the general internal medicine (GIM) curriculum issued by the Joint Royal College of Physicians Training Board (JRCPTB).³ This poses a stark dilemma: with patient safety being our principal concern, should those of us with limited or no training in ultrasound imaging conduct a risky procedure once a year simply to tick a box? The short answer is that currently, if we wish to progress through general medical training, we must.

Trainee opinion is mixed. In the Royal College of Physicians' publication *The medical registrar: empowering the unsung heroes of patient care*⁴ opinion was divided over the importance of being able to do such procedures. Some felt that all medical registrars should be competent; others believed such procedures were best left to those who had more experience. Most agree on the challenge of maintaining their skills in procedures that they do not perform regularly.

As registrars in diabetes and endocrinology, it is a challenge to tick the CVC insertion box given the diminishing number of central lines inserted on the acute medical take and the reluctance of intensivists to train up a registrar who will be unable to maintain their skills with regular practice. So, where do you turn when the box still needs to be ticked? A course, of course. We have both recently attended a CVC course, complete with a practical session incorporating CVC insertion into a mannequin. While we left with improved knowledge and skills surrounding CVC insertion and care, the question remains that if an unwell patient requires a line tomorrow, are we the best people to be doing it? If something goes wrong, is it defensible to state that you inserted a line on the basis of very limited practical experience when you could have called someone who does multiple lines each week? If you were a patient requiring a central line, would you choose the practitioner who performs the procedure once in a blue moon or the operator who does lines every day?

Most of us do not routinely carry out CVC insertion; however, currently we all need to tick this box to progress. Our trepidation is not borne out of laziness or a lack of willingness to engage with training but concerns about patient safety in the face of conflicting guidance and a lack of common sense. CVC insertion should not be a 'tick-box' procedure. Skills lab training is insufficient. Surely it is time for this procedure to be taken off the GIM curriculum, thus reflecting changing practice and expectations that high-risk procedures should be carried out by highly trained individuals. Patient safety is paramount and the GIM curriculum should change to reflect this.

Conflicts of interests

The authors have no conflicts of interests to declare.

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- 3 Royal College of Physicians. *The medical registrar: empowering the unsung heroes of patient care.* London: RCP, 2013.
- 4 Joint Royal College of Physicians Training Board. Specialty training curriculum for general internal medicine. London: JRCPTB, 2009.