We also measured plasma cystatin C and urine N-acetyl \( \beta \)-D-glucosaminidase, a sensitive marker of tubular dysfunction. Thus we believe that we have covered quite comprehensively both glomerular and tubular functions of kidney.

Finally, there were no differences in the post-operative complications of the patients in the two groups. In conclusion, we think we have targeted a right population: patients with mild pre-operative renal dysfunction who certainly are at risk to develop post-operative renal damage and assessed their renal function with adequate methods. In our study, the renal function deteriorated after cardiac surgery similarly after N-acetylcysteine (NAC) and placebo. Our results agree with the previous study by Burns and colleagues. On the basis of current evidence, NAC does not seem to work in the fight against post-operative renal deterioration. Whether the role of NAC would change as a preventive medication needs to be shown in a randomized and controlled study. We look forward to see if Dr Shebabi’s study will provide new evidence that would change the current concepts.

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Airways skills in new-start SHOs

Editor—I read this article on the airway management skills of novice senior house officers (SHOs) with interest. I agree with the authors that facemask anaesthesia should be given a high priority when training new-start SHOs. But I found a significant difference in the usage of facemask between the figures mentioned in this article (23%) compared to that in our hospital (5.17%). It would be helpful to us as well as to other departments to know typically in what type of operations the trainees in your region are using facemask anaesthesia in order to increase airway training opportunities.

I feel your overall analysis of airway management techniques is commendable and I share your concerns about decreasing opportunities in airway management.

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Editor—I read the article on the Scottish National Prospective Study of airway management skills with interest. To my surprise, there was no reference to the videolaryngoscope as a teaching aid to intubations. We are fortunate in our hospital to have one and I must say that it’s an illuminating experience even for seasoned anaesthetists. From a training point of view, no more does a consultant have to perform contortions over a fumbling trainee’s shoulder with bated breath as he tries to ensure that the best possible view has been obtained. It is there on the screen for all to see.

I recommend using it for better supervision with real-time instructions, as each step of the intubation can be observed and commented upon, thus getting the maximum out of each opportunity to intubate. Furthermore, every attempt can be recorded as an image, and the trainee can review the effect of his/her manipulation of the airway.

The only drawback from the trainee’s point of view being that the videolaryngoscope provides a wider more panoramic view of the larynx, thus not fully replicating the more difficult, dim, restricted view that is available with the standard laryngoscope. Despite all this, it is an excellent teaching aid and has been known to reduce the learning curve for intubation.

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Editor—The article by Whymark and colleagues raises many interesting issues regarding airway management training.

A quick survey of the two new start SHOs in our department showed that both had not performed any exclusively facemask anaesthetics in their first 3 months. From my own log book, I performed less than 10 in my first
Study of airway management skills in new-start SHOs' response to our study ‘A Scottish National Prospective Study of Airway Management Skills in New-Start SHOs’

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Editor—We were interested to read the comments made in response to our study ‘A Scottish National Prospective Study of Airway Management Skills in new-start SHOs’ and welcome the opportunity to respond to them.

Firstly, to address Dr Ratinalikar: as this was a study of trainees all over Scotland, it is not possible to comment on the type of cases being done using a facemask only in many of the workplaces included in the study. However, in our own institutions, trainees are directed to day case minor gynaecological, urological, and orthopaedic surgery to gain experience using a facemask. Some of these cases are opportunistic learning exercises, and a senior anaesthetist working alone may elect to use an LMA in place of the facemask, but can identify a training opportunity when a trainee is present.

Secondly, in response to Dr Clarence: there are many types of video-assisted aids to laryngoscopy available today. While some may have a place in clinical practice, particularly when the more difficult airway is encountered, we firmly believe that new-start trainees should master basic skills such as facemask holding and direct laryngoscopy before progressing to experiment with such adjuncts.

Thirdly, we agree with Dr Hodgetts that although trainees can move between theatres to maximize intubations performed, this is at the expense of learning the conduct of anaesthesia and the management of emergence and extubation. This period is vitally important and can be the source of many critical incidents if not managed correctly. Our personal experience is also that some Consultants find it disruptive to running a list and teaching trainees if they are popping in and out of theatre repeatedly.

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Fluid responsiveness using non-invasive predictors during major hepatic surgery

Editor—We read with great interest the study by Solus-Biguenet and colleagues regarding the evaluation of fluid responsiveness using non-invasive predictors during major hepatic surgery. The authors compared the value of several indices of fluid responsiveness and concluded that the respiratory variations in arterial pulse pressure obtained from the invasive (PPVart) and Finapress™ (PPVfina) arterial pressure curves were the most accurate predictors of response to volume expansion. Moreover, they concluded that respiratory variations in the pulse oximetry waveform (PPVsat) were greater in responders than in non-responders to volume expansion even if the predictive value of this parameter was weaker than PPVart and PPVfina. These results are extremely interesting, as pulse oximeters are non-invasive, inexpensive, and are daily used in the operating theatre. Thus, the results from this study suggest that PPVsat may be a useful predictor of fluid responsiveness in the operating theatre. However, in our opinion, technical description regarding the way the pulse oximetry waveform was acquired in this study is not clear enough to sustain the hypothesis that PPVsat is a weaker predictor of fluid responsiveness than PPVart and PPVfina. The software generates a signal that is substantially filtered, amplified, and smoothed before display. However, some data acquisition software allows disengaging the automatic gain incorporated in the pulse oximeter in order to avoid the potential influence of the signal processing on the displayed waveform. Using this technique, PPVsat has been shown to be strongly related to PPVart with far lower limits of agreement than those described in the present study. We can postulate that Solus-Biguenet and colleagues did not control this limiting factor as no mention is made concerning the gain and as agreement between PPVart and PPVsat was lower than those previously reported.

As some recently published studies are suggesting, PPVsat is strongly influenced by the site of measurements (ear, finger, forehead). Consequently, it is of major importance to mention the site of measurement and to consistently use the same site between patients, as an up to 10-fold variation can occur. Mixing the sites may induce an important bias.

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