assigned, and the limitations were addressed in our discussion. The study was registered at clinicaltrials.gov (NCT0037374), and we apologize if the information was not made clear in the original submission. In the same regard, a pre-trial power analysis was not performed. Indeed, trying to define a significant difference in an outcome for which we had no information what to expect, was in our opinion in the very definition of new observational study, even with a randomized structure. The second assumption goes back to the practicality and clinical significance of the study: if you are not able to find a significant difference after 2 yr of enrolment with over 8000 patients’ encounters and 91 residents (both subjects of the investigation), then you should be able to assume that a real different does not exist. Still the clinical question remains, whether or not, even with a statistical significance, the clinical impact of such difference is relevant.

Regarding the ‘Intention to treat analysis’ (ITT) concern: ITT is a strategy for the analysis of randomized controlled trials, which includes all of the patients based on the treatment groups they were originally assigned to, regardless of whether the treatment was actually received or there was subsequent withdrawal from or deviation from the protocol. Simply, it means that once the patient is randomized, the patient should be included in the analysis based on ITT analysis. It is intended to maintain the treatment groups similar to one another and also allow for non-compliance and deviations. Randomized clinical trials analysed by the ITT approach provide unbiased comparisons among the treatment groups. Since a full application of the ITT analysis requires primary outcome data for all patients to be available, minimizing the missing response is very important for the implementation. However, no consensus exists about how missing responses should be handled in ITT analyses. The simple approach to handle the missing data could be the method of the last observation carried forward. In contrast, per-protocol analysis only includes the patients who complete the entire clinical trial according to the protocol. The ITT analysis is usually used for primary endpoint analysis; for secondary analysis, other strategies could be used. Given our study design, it was not a feasible option.

The primary outcome analysis suggested by Nørskov would be an ideal and valid alternative for future work. The choice of using a composite accuracy score rather than the actual individual variables, for the analysis of the resident accuracy in determining the airway difficulty, was discussed with our statistician, and, in our opinion, is more effective and comprehensible to the reader. While the latter would have communicated traditional statistical meaning, we sought to use language that would be more relevant to the practitioner. The use of different language would not change the poor sensitivity and specificity.

Lastly, regarding Nørskov and colleagues’ concerns about our figures and the consort frame statement: given the mixed design goals of our study which spanned educational, quality improvement, and research goals, we attempted to present the actual methods utilized in a form that was most comprehensible to the reader. Since we did not follow a per-patient randomization protocol, traditional figures would not have been appropriate. We regret any confusion that may have resulted.

We performed the largest prospective study to determine whether or not a well-known airway assessment tool really serves the purpose of difficult airway recognition in a clinical and practical setting, and when performed systematically and correctly. The only other large-scale study that can be considered similar to ours is the one from Catalonia, Spain, but it has unfortunately only been presented as a meeting abstract.

In summary, our study was a composite design of education and airway assessment making a single analysis modality difficult. The study presented some limitations and study design challenges that were addressed in the best way possible. Owing to such limitations, we recommended that the study be considered for the clinical and practical standpoint, rather than simply the statistical value.

Declaration of interest

None declared.

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Psoas compartment block for surgical repair of inguinal hernias

Editor—We read with considerable interest the letter by Mokini and colleagues about the psoas compartment block (PCB) as a sole anaesthetic technique for surgical repair of inguinal hernias. Although we encourage the use of this technique for less obvious surgeries and therefore congratulate the authors on this publication, we still have some remarks and concerns related to the use of this technique for lower abdominal wall surgery.

The L2–3 approach of a PCB presented by the authors was first described by Hanna and colleagues in 1993; therefore,
the technique described by Mokini and colleagues actually is a well-known approach of the PCB rather than a modification of a PCB as suggested by the authors. However, as rightly recognized by the authors, the use of this technique has some restriction which should be known to physicians before considering this technique for inguinal surgery. In contrast with lower lumbar dermatomes, the higher lumbar dermatomes are unreliably blocked by a PCB, regardless of which approach has been used. A possible explanation for this is the anatomic location of the lumbosacral plexus. Kirchmair and colleagues reported that in the majority of cases, the lumbosacral plexus lies within the psoas major muscle, and not inside a sheath between the muscles. We wonder if the reproducibility of this technique was also tested in a hernia repair patients group.

Furthermore, the authors rightly pointed out some serious complications of a PCB such as hypotension, epidural- or subarachnoid spread, systemic toxicity, renal puncture, and retroperitoneal haematoma. A more cephalad approach of the PCB like the L2–3 approach suggested by the authors could be more prone to an unattended puncture of the kidney. The most frequently occurring undesirable side-effect of a PCB is a bilateral spread of the injected local anaesthetics, resulting in epidural anaesthesia. It was previously thought that the occurrence of bilateral spread depended on the approach taken for a PCB. However, Gadsden and colleagues concluded that injection of a local anaesthetic with high injection pressure (>= 20 psi) during lumbar plexus block commonly results in unwanted bilateral block and is associated with high risk of neuraxial block. Mokini and colleagues did not describe any injection pressure or assessment of bilateral local anaesthetic spread resulting in an epidural anaesthesia in their patient(s). In theory, the suitability of the PCB as anaesthetic technique for inguinal hernia repair suggested by the authors could be erroneously attributed to unnoticed epidural anaesthesia.

Finally, in a time of increased emphasis on patient safety, information with regard to success rate or complication rate of this technique for inguinal surgery is needed. In that sense, some data with regard to the number of patients anaesthetized with this technique and the reliability of the result thereof would have been helpful. Until then, in our opinion, the lack of reliability regarding blocking dermatome L1, together with the fact that this technique probably does not anaesthetize manipulations of the spermatic cord and the peritoneum sac (also described by Mokini and colleagues), makes this technique unsuitable for most patients undergoing inguinal hernia surgery.

Declaration of interest

None declared.

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L1–2 roots block with psoas compartment block?

Reply from the authors

Editor—We thank Drs de Leeuw and Perez for their interest in our letter and we would like to make a few comments.

Our modification of the psoas compartment block (PCB) technique is that we aim at eliciting the twitch of the lower anterior abdominal wall (i.e. L1–2 root stimulation), instead of searching for the quadriceps twitch (i.e. L3–4 root stimulation), in order to increase the chance for a successful block and avoid femoral and obturator block, see Figure 1 and accompanying video.

In selected inguinal hernia patients where local anaesthetic infiltration was not possible and general or neuraxial anaesthesia was at high risk or impossible to perform, we found reasonable to propose PCB at L2–3 level for three main reasons. First, there is a higher probability to find L1–2 roots block with psoas compartment block?