Single infraclavicular injection

Editor—Although we applaud the continued investigation by Fredrickson and colleagues1 of a single infraclavicular injection in comparison with concomitant infraclavicular plus distal median, radial, and ulnar nerve block, we question the necessity of this study. In the infraclavicular only group, most patients (26/30) received an additional median, radial, or ulnar nerve block. The success rate is much less than the published results of other control studies (85–100%).2–4 A possible explanation may be an imperfect block technique.5 On the other hand, according to our clinical practice, we believe that 15 min is not long enough to assess the block effects. The durations for evaluation in most studies were 30 min or more. And we can find that the success rate increases significantly from 15 to 30 min.2,3 6–7 Another potential problem for the combined technique could be the increased risk of nerve injuries and infections which was not indicated in the article. The only message worth of note was that procedure-related paraesthesia was higher in the combined group (5 vs 1). Although the authors believed that ultrasound guidance can avoid the mechanical trauma caused by needles, we remind that high injection pressures, local anaesthetic neurotoxicity, and ischaemic injury caused by epinephrine and neural oedema may also result in nerve injuries.8 9 As for the primary aim of this study (tourniquet analgesia, surgical anaesthesia, early return of upper arm motor function, and prolonged postoperative analgesia), we agree that different concentration and amount of drugs infused through a brachial plexus perineural catheter may be helpful, but a detailed infusion proposal needs further investigation. So we suggest that the accelerated onset time of 6 min may not deserve the risk of nerve injuries. If waiting another 15 min can improve the block effects, why should not we do that?

Declaration of interest
None declared.

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5 Machi A, Saa J, Suresh P, et al. Ultrasound-guided infraclavicular block: to target the axillary artery or the cords? Anesth Analg 2011; 113: 956
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Reply from the authors
Editor—We thank Drs Jiang and Jiang for raising several issues regarding our article,7 which will be responded to individually:

(i) The surgical anaesthesia success rate of the ‘infraclavicular only’ group was 93%, which is well within the previously reported ‘85–100%’ from previous studies. Regardless, we urge extreme caution comparing success rates between studies, as many variables other than the block technique contribute to the success rate (e.g. time from block placement until surgery—previous studies range from 25 to 60 min).

(ii) Re: the ‘imperfect block technique’: this claim is not supported by a surgical anaesthesia success rate of 93% at 30 min from block placement.

(iii) Re: only testing for 15 min rather than up to 30 min. The background to the tested hypothesis of the study, was to develop a block technique with a rapid onset. Anaesthetists in many (busy) settings will understand the value of a regional block with an onset time rivalling that of general anaesthesia. Indeed, surgery did not commence until 30 min after infraclavicular block placement. Testing for 30 min before preparing for surgery would delay surgery to >45 min after block placement—an onset time incompatible with many busy settings.

(iv) The authors’ assertion that the combined technique carries greater risk is purely speculative. Procedure-induced paraesthesia was similar between groups (P=0.21), and there were no persistent neurological complications in either group.

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