

Answer to first reply to “Delayed surgery in displaced paediatric supracondylar fractures: a safe approach? Results from a large UK tertiary paediatric trauma centre”

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Received: 26 September 2013 / Accepted: 29 September 2013 / Published online: 27 October 2013
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Dear Editor,

We thank Mr Huntley for his careful review of our paper and the associated literature. We acknowledge his concern regarding the low rates of well-documented pre-operative neurological examinations within this cohort, and too his concern regarding the high rate of iatrogenic nerve injury. We recognise that both of these factors are a cause for concern and that high iatrogenic injury may be erroneously attributed as a result of poor recognition of pre-operative nerve injury. The ‘test’ of neurological documentation was set deliberately high in the original paper investigating neurovascular documentation [1]—that is, we required documentation of individual nerves in terms of sensory and motor function, such as is required for medicolegal purposes. The reality is that most pre-operative documentation was probably of similar quality to other units (i.e. a mere statement of ‘neurovascularly intact’). Indeed, we are aware that your group has demonstrated similar problems with neurovascular documentation, particularly with the anterior interosseous nerve (AIN) [2]. In our case series, 9.5 % (19/137) of patients had pre-operative neurovascular deficit identified at presentation. We acknowledge there were several cases with incomplete documentation pre-operatively that may have contributed to the high iatrogenic nerve rates. We have now implemented an

assessment proforma to help facilitate accurate and detailed pre-operative neurovascular assessment and documentation, and detailed documentation has now increased from 8.8 % (12/137) to 81.6 % (31/38).

We also acknowledge your comment that an absence of evidence does not equate to evidence of absence. Retrospective observational data, such as this, has intrinsic error, which limits the utility and generalisability of the findings. We agree that definitive evidence to support delaying supracondylar surgery must come from either a well-designed prospective observational cohort study, or an interventional study. We hope our paper adds to the growing discussion within the literature and encourages greater collaboration amongst children’s orthopaedic surgeons to address this, and other fundamental questions of paediatric orthopaedics.

Conflict of interest None.

References

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2. Robertson JS, Marsh AG, Huntley JS (2012) Neurological status in paediatric upper limb injuries in the emergency department—current practice. *BMC Res Notes* 22:324

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