## Pediatric Anesthesia

However, several aspects of the surveys, in particular the practical aspects, were overlooked.

We believe that the pediatric anesthetic societies have an important role to play in fostering interest in research, quality improvement, and audits. Surveys are frequently sent out via mailing lists, which are maintained and controlled by the respective anesthetic society. It must then be the responsibility of these societies to guarantee high quality surveys by a robust review processes. Scientific committees are most suited to establish such mechanisms and the Association of Paediatric Anaesthetists of Great Britain and Ireland (APAGBI) has adapted such an approach for several years before permitting survey of its membership.

Clear and unambiguous instructions must be available from the societies and be adhered to in order to ensure a smooth facilitation of the review process. Also, the survey originators should ideally provide feedback of the results to the survey population although this has been notoriously difficult to achieve with any measure of reliability.

In addition, to provide better quality surveys by adopting the above 'best practice' as described by Tait and Voepel-Lewis (1), pediatric anesthetic societies should endeavor to collaborate on important issues within our specialties. A combined pathway or perhaps

### a standardized 'journal like' review process could be established to achieve this goal.

With the current initiative by Pediatric Anesthesia to 'join up' the Societies through the Journal, we have a real opportunity to interrogate national differences in practice and to try to understand if these differences come about via dogma collective experience or even science. Surveys and the differences in responses between groups may well prove to be a potent stimulus for intelligent discussion and a basis for research proposals. The APAGBI is ready to address these issues and will collaborate with other pediatric anesthetic societies to further improve the quality of surveys and not to 'just ask a few questions'.

### **Conflict of interest**

None declared.

Thomas Engelhardt<sup>1</sup> & Andrew R. Wolf<sup>2</sup> <sup>1</sup>Department of Anaesthesia, Royal Aberdeen Children's Hospital, Aberdeen, UK <sup>2</sup>Bristol University, Bristol, UK Email: t.engelhardt@nhs.net

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#### Reference

 Tait AR, Voepel-Lewis T. Survey research: it's just a few questions, right? *Pediatr Anesth* 2015; 25: 656–662.

# Reply to Engelhardt, Thomas; Wolf, Andy, regarding their comment 'Surveys and all – the role of pediatric anesthetic societies'

SIR—We thank Drs. Engelhardt and Wolf for their insightful comments regarding our recent publication 'Survey research: it's just a few questions right?'(1) The authors make an important point regarding the responsibility of our anesthesia societies to provide a robust peer-review process for surveys that utilize membership mailing lists. Indeed, the primary purpose of our article was to provide an overview of survey research methods not only for investigators but also for potential reviewers at the society and journal level. We apologize if we had not addressed this important aspect in more detail. The Society for Pediatric Anesthesia (SPA) has for many years adopted a similar approach to that of the Association of Paediatric Anaesthetists of Great Britain and Ireland in that all surveys requiring access to membership mailing lists must undergo peer-review and approval by members of the SPA's Research Committee. Once approved by the Research Committee, all surveys are then sent to the Executive Committee for final approval prior to distribution to the membership.

As a final note, we also agree with Drs. Engelhardt and Wolf that well-conducted collaborative surveys between pediatric societies exploring such topical issues as anesthetic neurotoxicity will be important as a means to explore and understand differences in regional and international practice. Given these mutual interests, we look forward to future collaborative endeavors by our respective societies that will promote reliable and meaningful survey research.

### **Conflicts of interest**

None declared.

### Reference

1 Tait AR, Voepel-Lewis T. Survey research it's just a few questions right? *Pediatr Anesth* 2015; **25**: 656–662. Alan R. Tait<sup>1,2</sup> & Terri Voepel-Lewis<sup>1</sup> <sup>1</sup>Department of Anesthesiology, University of Michigan Health System, Ann Arbor, MI, USA <sup>2</sup>Center for Bioethics and Social Sciences in Medicine, University of Michigan Health System, Ann Arbor, MI, USA Email: atait@umich.edu

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## Evaluating the efficacy and safety of scalp blocks in nonsyndromic craniosynostosis surgery

SIR—In the article by Rothera *et al.* (1), the authors report their experience with the use of scalp blocks and evaluate the efficacy in reducing intraoperative analgesia, minimizing transfusion requirements, and improving metabolic parameters during surgery in patients with nonsyndromic craniosynostosis. They demonstrated a reduction in the requirement of intraoperative remifentanil, but there was no reduction in intraoperative blood loss or improvement in metabolic and hemodynamic criteria.

We would like to address several reasons which may explain why the authors did not find a difference in the metabolic and hemodynamic parameters. Rothera et al. reported using a modified Pinoksy technique (2) for scalp blocks. The patients in the study by Pinosky et al. were all adult patients undergoing elective craniotomy for intracranial and, these adult patients underwent head pinning to stabilize the skull during surgery. Pinosky et al. introduced the scalp block prior to head pinning as they recognized that the stimulation caused by insertion of cranial pins led to significant increases in systolic and diastolic blood pressures, heart rates, and mean arterial pressures, and these fluctuations were detrimental in their population due to an increased risk of aneurysm rupture, intracranial pressure (ICP) elevation, and herniation. On the contrary, the patients in the study by Rothera et al. were all pediatric patients, none of them had described head pinning. With these divergences between the two groups, it is not unexpected that there were no differences in the metabolic and hemodynamic measures evaluated in the study.

In addition, the authors concluded that performing a distant nerve block rather than incision infiltration avoids the risk of hypertension and intravascular injection. However, inadvertent entry into the vascular entities, such as the supraorbital and supratrocheal vessels during a distant nerve block can certainly result in hypertension (particularly if epinephrine is used) and intravascular entrainment. In addition, these vessels are extensions of the internal carotid and ophthalmic vascular system, and injections with filler materials in this region have been reported to result in ptosis, ophthalmoplegia, and blindness (3). Fortunately, no such risk has been reported to date with anesthetic injection in the scalp block region, although there are several reports of adverse events after injection of local anesthetic in anatomic areas that have connections with the internal carotid and ophthalmic systems, such as injections in the nasal, dental, and other facial regions (4,5). Thus, blockade in these regions, while relatively safe, is not entirely innocuous.

It is important that we continue to improve existing techniques and investigate the safety and efficacy of new approaches in the goal of maximizing patient care and comfort. The use of distant nerve blocks has its reported benefits, but an appreciation of its potential associated risks is equally important in optimizing patient outcomes.

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