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Preventing adverse events in cataract surgery: sub-Tenon's blocks as an alternative to needle-based blocks

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We appreciate the opportunity to respond to questions raised by Eke and Kumar¹ about our recent manuscript, which described our recommendation to use the least invasive form of anesthesia that is appropriate for the patient during cataract surgery.² Specifically, cataract operations under topical anesthesia may have fewer complications than those performed under needle-based eye blocks such as peribulbar and retrobulbar blocks.² Eke and Kumar recommended an additional technique that we described in our paper, Sub-Tenon's block, as a first choice block if topical anesthesia is not appropriate for a patient. As they described, sub-Tenon's blocks use a blunt cannula instead of a sharp needle to place local anesthesia behind the globe, and are commonly used for cataract surgery in the United Kingdom (UK).

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While we agree that sub-Tenon's blocks have fewer sight-threatening complications than needle-based blocks,³ sub-Tenon's blocks are not as commonly used by anesthesiologist in the United States (US). There are no data on the reasons for its slower adoption in the US, but sub-Tenons blocks may be viewed as taking longer to administer and having more (inconsequential) bleeding and/or chemosis than needle-based blocks.⁴ While these are not reasons to avoid the sub-Tenon's block, they are factors that may affect US providers' reluctance to learn to perform them.

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Despite this, we agree that sub-Tenon's blocks may be considered in lieu of needle-based blocks, especially in cases where akinesia of the eye is preferable, and when anesthesia staff have training in performing them. Increased use of sub-Tenon's blocks in the US would require a commitment by institutions and faculty to learn and teach them, and allowance for some extra time for practitioners to perform them efficiently, especially during the initial learning curve.

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