



## Editorial

## Regional anaesthesia for eye surgery: Future development for education and quality



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Over the past 15 years, anaesthesiology for cataract has been revolutionised by the development of topical anaesthesia (simple, reproducible, efficient, inexpensive, and with no major constraints), to the detriment of invasive regional techniques (peri- or retro-bulbar) [1]. This practice has been favoured by the development of minimally invasive surgery (shortened operating times) and the marketing of sophisticated phako emulsifiers (ocular akinesia less necessary). However, the absence of akinesia and/or analgesia of the posterior chamber still results in many teams practicing regional anaesthesia and analgesia, especially for complex cataract surgery (i.e. post-radiation), retinal surgery and strabismus. In this context, training for loco regional anaesthesia and the quality of anaesthesia remain concerns for our specialty [1,2].

In this issue of ACCPM, two articles assess the learning curve and predictors of success for the medial canthus block.

Concerning the learning curves of regional anaesthesia in ophthalmology, few studies have been performed, contrary to other truncal regional techniques. Unsurprisingly, Guerrier et al. demonstrate a more rapidly acquired gesture autonomy by surgeons versus anaesthesiologists (9 [5–11] vs. 19 [10–27]). The explanation of this difference in favour of surgeons rests on the quality of their anatomical knowledge rather than on their dexterity.

These data should encourage the specialty of anaesthesia to review the initial training of its practitioners in ophthalmology, promoting learning by puncture simulations and e-learning to accelerate anatomical knowledge acquisition. The French Expert Recommendations (RFE) on ultrasound in peripheral nerve blocks places particular emphasis on these points and made recommendations requiring anatomical knowledge before making punctures and using ghosts. New practitioners should be encouraged to follow this teaching model [3].

Besides apprenticing, the quality of anaesthesia is a determining factor in intraoperative patient management, contributing to the reduction of adverse events (example: intraoperative hypertensive peak). In this sense, Guerrier's team brings new

elements of clinical prognosis of success. To date, the only determining factors considered were the volume injected, the duration of compression and the onset of chemosis. These data had been the subject of numerous anatomical publications. Similarly, the delay between the puncture and the onset of akinesia was not taken into account. The data reported by Guerrier et al. show that other factors influence and should be better taken into account: no previous surgery on the operated eye, adequate eyeball movements, important volume > 8 ml, and early onset of chemosis.

In summary, anaesthesia in ophthalmology should not oppose practitioners (surgeon vs. anaesthesiologists) or techniques (topic vs. regional or low vs. high volume) but serve patients. The data provided by these two publications should encourage practitioners to reinforce their training, particularly their anatomical knowledge, and to take into account multiple factors as criteria for block success [4].

### Disclosure of interest

Philippe Cuvillon: MSD and Grünenthal.

The other authors declare that they have no competing interest.

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