Pre- and postoperative monitoring of neuromuscular block within the anesthesiologist’s reach: is it possible?

Monitoría del bloqueo neuromuscular pre y post operatorio al alcance de los anestesiólogos: ¿es posible?

The guidelines and regulations for the use of equipment in clinical practice are designed on the basis of scientific judgment supported by strong evidence. Different regulatory standards and clinical practice guidelines recommend the concurrent use of monitoring of neuromuscular blockade (MNMB) from induction to education of anesthesia when using neuromuscular blockers. It is quite concerning that the findings of numerous reports show that only a limited number of anesthetists systematically perform MNMB. Notwithstanding the availability of friendly modules, many of us do not use this approach, may be due to lack of training or simply because we are not convinced of the benefits MNMB contributes.1

The design of new MNMB devices for mobile phones may facilitate access to the technology, reduce costs, and turn MNMB into a routine procedure under various scenarios, with a positive impact on the rigorous compliance of the minimum safety standards.2

We hereby submit to the Colombian Journal of Anesthesiology, our project entitled: “Pre-and post-operative monitoring of neuromuscular block within the anesthesiologist’s reach: is it possible?” The project involves the development of an app for intelligent personal devices and a MNMB prototype using low cost, friendly, and portable acceleromyography as a solution to this delicate issue. With this project, we expect to reduce the morbidity associated with pharyngeal obstruction, hypoxemia, and acute respiratory failure.3 The formalities for patent registration and agreements for biomedical manufactured components and software are currently underway.

We believe that this paper is in line with the objectives of the journal, has not been disclosed through any other media and has no conflict of interests. We kindly request the Editor to submit our proposal to the scientific community and expect their feedback, contributions, questions, recommendations, and assistance to materialize this initiative that we consider so pressing.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

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Conflicts of interest

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References