Letter to the editor

Prerequisites for introducing neural monitoring in thyroid surgery

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A R T I C L E   I N F O

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We read with interest the paper by Périé S. et al. entitled "International consensus (ICON) on comprehensive management of the laryngeal nerves risks during thyroid surgery" [1]. The manuscript rises significant additions for recurrent laryngeal nerve (RLN) management and intraoperative neural monitoring (IONM) in thyroid surgery [1].

Surgeons who introduce IONM, new accessories as continuous neural monitoring (C-IONM) and related procedures should have completed relevant training, possess operating privileges in the affected endocrine system and be able to address anticipated consequences of IONM use [1,2].

For modifications of IONM devices and procedures, surgeons should monitor their practice based on self-assessment. For example, new complex monitoring procedures as C-IONM, superior laryngeal nerve monitoring, greatly benefit from a well-trained team [3]. The more substantial the change in surgeons' practice and the higher the risk for the patient, more important is that surgeons complete relevant IONM didactic course, and have their performance objectively assessed [4,5].

Surgeons' responsibility for proper IONM use is dual:

- Technical component: using and setting up the IONM equipment correctly and understanding the inherent properties of the system to avoid an erroneous set-up (i.e., no muscle relaxation, correct electrode placement) [1];
- Interpretive component: is the surgeon performing IONM able to distinguish between a true response versus an artifactual one? [1]. When problems occur, can surgeon perform appropriate troubleshooting algorithms to identify and correct the issue? [1].

As the use of monitoring has become increasingly routine, surgical residency programs may begin to include IONM courses in their core curriculum, and test for competency in this area just as they do in other specialities (i.e., neurosurgery, spine surgery, laparoscopy).

The International Neural Monitoring Study Group (INMSG, www. inmsg.org) provides training courses for surgeon, as well as a means to certify levels of monitoring interpretative competence.

Surgeons who choose to perform technical and/or interpretive aspects of IONM should take advantage of INMSG educational resources.

Furthermore, IONM curriculum includes a foundation in anatomy and neurophysiology. The complex neuroanatomy and physiology require a highly differentiated C-IONM technique combined with an electrophysiological and clinical interpretation of the results.

Certainly, the report by Périé S et al. is important for the standardised application of IONM [1].

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Disclosure of interest

The authors declare that they have no competing interest.

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