Reviewer's report

**Title:** Loss of neuromonitoring signal during bilateral thyroidectomy: does it change the operative strategy?

**Version:** 2  **Date:** 22 January 2015

**Reviewer:** Kerstin Lorenz

**Reviewer's report:**

Re: 1. Are any ethical issues suitably addressed within the manuscript? no  
2. If the manuscript includes any individual data or is a case report, is patient anonymity maintained and is consent for publication of the data stated in the manuscript? yes  
3. Is any supporting data deposited in a suitable public repository? no  
4. If any software or database is introduced in the manuscript, is it available for the reviewers to test? Not appl.  
5. Does the manuscript adhere to any relevant standards of reporting? http://www.biomedcentral.com/about/editorialpolicies#StandardsofReporting yes

The authors present a survey in the French speaking society of endocrine surgeons regarding the use of intraoperative neuromonitoring (IONM) and surgical strategy in the event of loss of signal on the first side in planned bilateral surgery. This is of interest as it reflects possible differences in application and interpretation of IONM in different regions within Europe. As in any survey some shortcomings are due to reduced items included or presented and poor return rate; these cannot be changed. However, some aspects should be addressed in order to qualify for publication:

- what type of surgeons and type as well as size of hospital are represented?  
- were these ENT and/or general surgeons to what relation  
- how many thyroid cases do the respective surgeons and hospitals treat/year  
- reference to use of intermittent vs. cont. IONM should be given  
- exact type of IONM usage of the respective participants should be specified: routine all cases; selective "difficult", only malignant etc.  
- definition of LOS for the survey must be stated  
- how many of these LOS were correct and false? How often was algorithm to check LOS applied as advised in the intern. IONM guidelines?  
- line 8: what prognosis is involved?  
- "signal" is insufficient in evaluation IONM and should, if applicable, be replaced by "EMG"; if this was not applied a decisively different interpretation of data will be necessary  
- the application of algorithms does not reduce false positive IONM but helps to
identify them
- line 13: most likely surgery on the mentioned side is not discontinued but the second side is not approached
- conclusions (line6-8) as outlined cannot be made from the nature of the data provided

In summary, the manuscript is worth of publication as it is of interest; however substantial revisions are necessary.
Vote: Major revision.