Reviewer's report

**Title:** Association between postoperative cough and thyroidectomy: a prospective study

**Version:** 0  **Date:** 18 Feb 2019

**Reviewer:** Jessica Mathur

**Reviewer's report:**

This is an interesting study evaluating the impact of thyroid lobectomy on health-related quality of life from coughing 2 weeks after surgery. The authors have chosen patients who will undergo a unilateral procedure to enroll in their cohort. The control consists of those with other head-and-neck operations. It is unclear what kind of operations these are and if the neck is still being operated on. Perhaps a third group should be assessed including those who undergo abdominal or extremity surgery to evaluate the role of the endotracheal tube. I am unclear as to why the authors chose 2 weeks as the final point of assessment? This seems like post-operative recovery time and would be more beneficial to follow these patients out for at least 3-6 months. Also, the authors should provide more details about the questionnaire that they are using. It seems that it was validated on patients with CHRONIC cough, and the authors are testing it for acute change in symptoms. What is a mean score for the general population? What is the clinical significance? It seems that there is overlap between the two groups. Are their other risk factors that would contribute to the scores such as smoking status or presence of reflux or duration of the case? It is unclear if a multivariable analysis was done or if the findings are a univariable analysis. I am curious as to why the authors chose only to evaluate patients undergoing unilateral thyroid lobectomy and not total thyroidectomy? Finally, was a sample size calculation performed? What difference were the authors intending to find and is their study adequately powered. Detailed sample size calculation needs to be provided.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
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