Reviewer's report

Title: Unilateral versus bilateral thyroarytenoid Botulinum toxin injections of in adductor spasmodic dysphonia

Version: 1 Date: 29 November 2008

Reviewer: Victor Helmstaedter

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The injection of botulinum toxin type A into the thyroarytenoid muscle represents the therapy of choice in the treatment of adductor spasmodic dysphonia today. The approach most often used is the transcutaneous injection under electromyographic guidance. Herein, some groups perform the sole unilateral injection while others treat bilaterally. No clear guidelines exist. Furthermore, various injection dosages are reported.

# Instead of using the term “botulinum toxin”, the authors should use “botulinum toxin type A”.

1. Is the question posed by the authors new and well defined?

The authors address the question of the unilateral vs. the bilateral injection. They further want to find the optimal treatment dosage of botulinum toxin type A (formula: Dysport). They also develop a Neurophysiological Scoring System for better electromyographic treatment documentation.

The question posed by the authors is not new, but is still unanswered and often discussed. The aim of the manuscript is clearly stated.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

Yes, methods and the technique of injecting botulinum toxin are appropriate and well described. Anybody can replicate the work.

3. Are the data sound and well controlled?

Yes.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

The patients had to answer self rated efficacy and complication scores questionnaires. The treating physicians used their Neurophysiological Scoring system for better documentation of right canula placement. Both are appropriate procedures for subjective assessment.

5. Are the introduction, methods, discussion and conclusions well balanced and
adequately supported by the data?

The introduction does refer to the most important points. The two paragraphs concerning “Botox and Dysport” should be shortened and they rather belong to the methods section.

The Neurophysiological Scoring system is supportive in controlling the canula placement, but overall distracts from the main objectives of the manuscript. All parts concerning the NPS should be shortened. Figures 1 and 2 and table 3 do not really help to answer the question posed in the introduction.

The results section accurately reports the results, which are depicted in figures 3 to 6.

All important points are mentioned and discussed in the discussion. But it appears too long, which is due to some missing structure. Several points (e.g. NPS score, local anaesthesia, physiology) are mentioned several times. I recommend some shortening, which will result in better structure without repetitions.

6. Do the title and abstract accurately convey what has been found?

Yes.

7. Is the writing acceptable?

Grammar and style are acceptable. Few typing errors can be found … starting with the first one in the title: “of”.

All comments made belong to the category “discretionary revision”.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.