Author's response to reviews

Title: The impact of preoperative language mapping by repetitive navigated transcranial magnetic stimulation on the clinical course of brain tumor patients

Authors:

Nico Sollmann (Nico.Sollmann@lrz.tum.de)
Sebastian Ille (Sebastian.Ille@lrz.tum.de)
Theresa Hauck (Thehauck@googlemail.com)
Stefanie Maurer (S.Maurer@tum.de)
Chiara Negwer (Chiara.Negwer@lrz.tum.de)
Claus Zimmer (Claus.Zimmer@tum.de)
Florian Ringel (Florian.Ringel@lrz.tum.de)
Bernhard Meyer (Bernhard.Meyer@lrz.tum.de)
Sandro M. Krieg (Sandro.Krieg@lrz.tum.de)

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Author's response to reviews:

Dear reviewers,

Thank you very much for your encouraging comments regarding our manuscript called „The impact of preoperative language mapping by repetitive navigated transcranial magnetic stimulation on the clinical course of brain tumor patients“. Below you can find answers to your concerns.

Reviewer #1 (Andrew Fabiano):

Good cohort study of a new technique for language localization. Serves as foundation data for larger studies.

Discretionary Revisions

Manuscript might benefit from English-language revision to improve prose.

Answer:

Thank you very much for your suggestion. However, previous to our initial submission, the manuscript was checked by an English native speaker.

Reviewer #2 (Sabareesh Natarajan):

Sollmann et al. present results after 50 patients who underwent resection of tumors in language eloquent areas of the brain using rTMS. They divide the patients into two comparable cohorts one where the results of the rTMS were available to the surgeons and the first were they were not. The size of the craniotomy was smaller and the immediate postoperative language deficits were lesser if the rTMS results were known to the surgeon. They showed a trend to a better outcome in multiple other variables although they were not statistically
significant. The manuscript is well written, referenced and discussed. The title can be changed to narrow down on their actual results. They acknowledge their limitations well. This is the first report of rTMS and its potential clinical benefit in language eloquent tumors. Large well designed RCTs will be needed to confirm these findings but this is definitely the first step toward that. As has been previously reported rTMS is not very good in delineating posterior language areas and their studies confirm the same. It would be interesting for the readers to have an idea of the cortical location of these tumors and their relation to the anterior vs posterior language areas.

Answer:

Regarding the title of our study, we would prefer to stick to the original one since we have the feeling that it generally compromises the different parameters examined in the present approach. On the other hand, it is correct that it therefore does not focus on results only. In case that you regard a title change as an essential point contributing to the quality of the manuscript, we would of course highly appreciate a helpful suggestion.

We share the opinion that large RCTs are highly needed to confirm or improve the results presented in our manuscript. Accordingly, we added this point to the conclusion (5. Conclusions).

According to your comment, we added information about the tumor location with respect to anterior and posterior language-related cortical areas to the result section (3.1 Characteristics of patients and lesions). The classification (anterior vs. posterior location) was performed according to Krieg et al. (2014; Optimal timing of pulse onset for language mapping with navigated repetitive transcranial magnetic stimulation).