Author’s response to reviews

Title: Non-Contrast-Enhanced Magnetic Resonance Angiography of Facial Arteries for Pre-operative Evaluation of Vascularized Submental Lymph Node Flaps

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Author’s response to reviews:

Dear Editor:

I sincerely apologize for my mistakes in the revision work. I upload the newly versions for the revision.

Response to Editor:

1. In the Introduction you refer to "steady state processing". This is wrong. It should be "steady-state precession" (as in SSFP). Please avoid using manufacturer's trademarked terminology ("NATIVE" -- which is Siemens) rather than the generic. This should be corrected.

Response:

Thanks for the Editor’s comment. We modified the sentence in “Background” section, page 5, last sentence as “Sakai et al. proposed non-CE four-dimensional MRA with modified true fast imaging and steady-state free-precession as well as a flow-sensitive alternating inversion recovery scheme for spin tagging of blood labeling sequences using a three Tesla (3T) magnetic resonance imaging (MRI) system to evaluate 15 patients with head and neck tumors.”
2. Bigger picture: It'd be good if the authors had more description about the new(ish) pulse sequence, and how they prescribe the saturation band for their specific application.

Response:

Thanks for Editor’s comment. The sequence we used in this study was not “non-CE four-dimensional MRA with modified true fast imaging and steady-state free-precession (SSFP)”. The sequence we used was Inhance 3D-MRA. The Inhance three dimensional MRA was a kind of phase contrast velocity MRA and did not need to use the saturation band during taking the image. We had described the brief of this sequence in the “Introduction” section, last paragraph.

3. The gadolinium-agent dose is described as "0.2 mL/kg gadobutrol" (Methods, MRI Technique). While this ml/kg dosing is possible (and would be "double dosing" for this agent), it it typical to describe gadolinium dose in terms of mmol/kg, not ml/kg. I would strongly suggest that the authors describe dose in terms of mmol/kg.

Response:

Thanks for Editor’s comment. We would describe the dose as 0.2mmol/kg. The dosage of gadobutrol we used for MRA was 0.2mmol/kg without using injector, higher than “Instruction for Use” suggestion.

4. Authors repeatedly use the term "Inhance 3D-MRA" which is a manufacturer-specific trademark. This is tantamount to free advertising for General Electric. The authors should use the generic descriptor of "inflow-enhanced SSFP with IR saturation". They can abbreviate it to "non-contrast MRA" or NC-MRA or something, but should not repeatedly use a trademarked name. It is fine to mention "Inhance" once, but not to use continually.

Response:

Thanks for Editor’s comment. The Inhance 3D-MRA was kind of phase contrast MRA. We used 3D PC-MRA to replace the Inhance 3D-MRA. We rewrite the 2nd paragraph, first sentence in page 6 as “In October 2010, a 3T MRI system with a commercialized non-CE-MRA technique using three-dimensional phase contrast (PC) velocity MRA (3D PC-MRA) was installed at our institute”. And the Inhance 3D-MRA in the manuscript were all replaced by 3D PC-MRA. The Cube-T1, Cube-T2 were replaced by Volume-T1, Volume-T2. We also rewrite the “Method, MRI Technique” section, 3rd sentence as “The order of the scanning sequences were as follows: 3D fast spin-echo T1-weighted image (Volume-T1), 3D fast spin-echo T2-weighted image (Volume-T2), 3D PC-MRA, and CE-MRA”.

5. In Results line 3 (they really need page numbers!) it says "were clearly delineated" which is vague and confusing. I *think* the authors mean "both authors graded image quality 3 (highest)". If that's what they mean, they should just say exactly that.
Response:

Thanks for Editor’s comment. We added the page numbers. And we also rewrite the 1st sentence of “Results” section as “All 40 facial arteries from 20 patients were successfully imaged using 3D PC-MRA and CE-MRA. Of these, 15 arteries (37.5%) imaged using 3D PC-MRA (Figure 2a) and 21 (52.5%) using CE-MRA (Figure 2b) were exactly delineated by both radiologists.”