Reviewer’s report

Title: Contribution of diffusion-weighted imaging to conventional MRI for detection of haemorrhagic infarction in ovary torsion

Version: 0 Date: 04 Mar 2017

Reviewer: Yingxin Chen

Reviewer’s report:

Adnexal torsion is uncommon and is estimated to occur in only 2.7% of gynecologic emergencies in the United States. A delay in the diagnosis of torsion results in loss of ovarian function, underscoring the necessity for urgent surgical intervention to prevent ovarian infarction and necrosis. Although ultrasonography is the primary imaging modality for evaluation of adnexal torsion, MRI is particularly helpful in young or pregnant patients with equivocal sonographic findings, as it provides excellent soft tissue contrast without radiation exposure.

In this study, authors the first prospectively designed study searching the efficacy of DWI in differential diagnosis of hemorrhagic infarction and non-hemorrhagic infarction as well as comparison of torsed ovary versus contralateral non-affected ovary.

Overall, the manuscript is relatively well written, the statistics are nicely performed and the study contains some provocative data given previous findings. I have no further comment.

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

Yes

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

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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