Reviewer's report

Title: Recovery of an injured corticoreticular pathway via transcallosal fibers in a patient with intracerebral hemorrhage

Version: 2
Date: 24 March 2014
Reviewer: Hideyuki Yoshioka

Reviewer's report:

In this case report, the authors insisted that DT tractography demonstrated the recovery of an injured CRP via transcallosal fibers. Although the paper is quite interesting, there are serious concerns in this paper and the conclusion led by the authors does not sound convincing.

[Major points]

1) There is a possibility that the depicted lines of the left CRP at 16 weeks were artifacts, since fiber crossing, a major artifact in tractography1, is occasionally observed at the corpus callosum. The authors should set other combinations of ROIs for depicting the CRP and validate the lines (for example, (1) seed ROI: reticular formation of the medulla, target ROI; contralateral premotor cortex, (2) seed ROI: midbrain tegmentum, target ROI; contralateral premotor cortex). They also should show other tractography data of different timings such as follow-up after 16 weeks.

2) Moreover, since the validation of the depicted lines of tractography is quite difficult, it is necessary to present the supporting data using other modalities such as electrophysiological examinations or functional MRI that show the increased activation of the contralateral premotor cortex.

3) Since the conclusion is extraordinary novel, the authors should present the similar results in case series if possible. The authors already have reported stroke and head trauma cases involved the CRP. I wonder if there were other cases in them showing the recovery like this case.

[References]


Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.