Reviewer’s report

Title: Intrathecal blood injection: A case report of a rare complication of an epidural blood patch

Version: 1 Date: 07 Apr 2020

Reviewer: Dajie Wang

Reviewer's report:

Thank you for submitting your manuscript to BMC Neurology. This is an excellent case report that presented new and valuable clinical information. Epidural blood patch is considered the standard care for spinal headaches from needle related dural punctures. However, it is controversial when used for surgery related dural leaks. Please reference: Wong AK, Rasouli MR, Ng A, Wang D. J Pain Res. 2019 Oct 11;12:2825-2833. doi: 10.2147/JPR.S191589. eCollection 2019. PMID: 31632132. I also have the following suggestions:

1. Page 3 line47: "blood products were visualized to spread intrathecally on fluoroscopy." Please revise. Blood products are not radiopaque. We should not be able to visualize it on fluoroscopy.

2. The discussion of potential treatments in the discussion section is excellent. Please describe more in details about this patient's hospital course and the treatments this patient received during his hospital stay.

3. If possible, please publish images of MRI of lumbar spine to show CSF leak and image of fluoroscopic pictures of injection.

4. Please include a paragraph in the discussion section about the mechanism of blood products causing mental status changes.

5. 20 cc of blood injected in this case appeared to be more than what we normally use for epidural blood patch. Please discuss whether this complication can be avoided, and whether the severity of symptoms can be reduced, if a less amount of blood was used for the blood patch.

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.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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