Reviewer’s report

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

Version: 1 Date: 03 Apr 2020

Reviewer: Tatsuya Ohtonari

Reviewer's report:

This article seems to be an important report which suggests the higher risk than conventional assumption of intrathecal injection in epidural autologous blood patch. As this report suggests, conventional EBP-method using epidural needle always contains the risk of intrathecal injection. So far intrathecal injection has been thought to bring relative mild symptoms such as fever, radicular pain, lower extremity weakness, or local pain, but this report urges the further attention regarding intrathecal blood injection because of the severe systematic complications. In this regard, we usually perform EBP utilizing long catheter to detect dorsal epidural space with accuracy, confirming the epidural space with the contrast medium before the injection of autologous blood. (Ohtonari T, et al. A novel technique of multiple-site epidural blood patch administration for the treatment of cerebrospinal fluid hypovolemia. J Neurosurg. 2012;116:1049-1053.)

There is one question and demand of correction about your article. As you suggested, SWI revealed diffuse infiltration of injected blood. In contrast, on T2 FLAIR, ventricular hyperintensity as you describe appears to be not so clear, because CSF and diffuse blood intensity are similar intensity.

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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