Reviewer’s report


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Reviewer: Takahito Nakajima

Reviewer's report:

The authors demonstrated manifestations of multi-slice computed tomography (MSCT) in Abernethy malformation and its diagnostic accuracy. Although the sample size was small, cases with Abernethy malformation were well described. However, some important discussions for MSCT of children were not introduced in this manuscript.

Major issues:

#1 Some discussions or descriptions are required about MSCT for children.

The effect of heart rate and respiration should be considered for CT in children. High heart rates might affect the quality of CT images. The frequency of respiration is another important factor. The authors should describe the condition of CT acquisition, for example, with or without general anesthesia or any sedative treatments. Please discuss the difference of image quality between the two different CT scanners.

#2 Discrepancy of the classification of Abernethy malformation between MSCT and DSA

In Table 2, two cases were classified as type Ib by MSCT and as type II by DSA. This discrepancy might be a weak point of MSCT. Please discuss this point.

#3 Advantage of DSA

The main advantage of DSA would be that it can show the hemodynamics of portal flow in patients with Abernethy malformation. Please discuss this point in the manuscript.
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:

Acceptable

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