

Peer Review File

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Reviewer A

Dr. N. Balasubbiah and colleges have submitted an interesting case report demonstrating the importance of pulmonary vascular 3D reconstruction in lung resections. Although the interest of this work is evident, from my point of view, it is necessary to take into account several limitations:

- This article shows only two clinical cases.
- Arterial vascular anomalies are compared with venous anomalies.
- Patients are not comparable in age, pathology or anatomical resections.

All these points are important because it makes no sense to compare two such disparate cases to justify the use of a technique. It is indubitable that 3D reconstruction would be useful to improve the anatomical resections of the lungs but this work fails to rigorously demonstrate its initial assumption. However, I think the article shows a rare case of anatomical malformation that may be of interest.

The finding of a malformation of an A5 and A9 mediastinal branch, in addition to its management with previous reconstruction, may be subject to publication. For this reason, I recommend a major review with the restructuring of the first clinical case as a single case with its previous reconstruction and its subsequent intraoperative finding

Reply: We accepted the reviewer's comment, made the major correction by writing a single case report on the first case. In view of the major change, we also modified the title.

Reviewer B

This case report emphasized an importance of 3-dimensional reconstruction in VATS surgery.

The first case is amazing and very interesting. I personally enjoyed the YouTube channel of the author.

I would like to watch the video of the second case. I would like to know how they

failed in the second case. Authors should upload the unsuccessful case as well.

Reply: The second case was performed during covid pandemic where our operating theater was converted to ICU to cope with the Covid-19 crisis. The surgery was carried out at an outsourced hospital and the hospital did not have a functioning video recording system. Hence very regretfully, we do not have the video for the second case.

Reviewer C

The authors have demonstrated the importance of analysing the preoperative imaging. Be it 3D or 2D the surgeons should be able to analyze and be prepared to tackle the anatomical variations. Not all hospitals will have the expertise to provide 3D recon. So the authors should emphasise this fact in conclusion.

Reply: The software we used for 3D reconstruction is a free open software, HOROS/ Osirix, run by MAC and it is done by surgeons. We actually advocate the operating surgeons to perform the 3D reconstruction and analyze the image before surgery.