Reviewer’s report

Title: Quantifying the learning curve for pulmonary thromboendarterectomy

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Reviewer: MM Madani

Reviewer's report:

Thank you for inviting me to review this interesting manuscript. The manuscript comes from an experienced center in Boston with an excellent multidisciplinary CTEPH team. Although the manuscript is a retrospective review of the results of PTE surgery, I believe it warrants publication, especially given the recent surge in surgeons' interest in pulmonary endarterectomy as the surgical treatment for chronic thromboembolic pulmonary hypertension. As authors indicate, there are no previous published data to assess the learning curve for pulmonary endarterectomy, however it is quite reassuring that these authors came to a similar conclusion to what our group had come up with a few years ago. Although, our manuscript was not accepted for publication, the findings were presented as an abstract at the 2013 annual meeting of Western Thoracic Surgical Association meeting: Pulmonary Endarterectomy: What Constitutes Adequate Surgical Training? The conclusion was also that at least 100 pulmonary endarterectomies are needed before surgical expertise/mastery is gained.

I have a couple of comments:

I would like the authors to elaborate on the complication rate. They note that 54% of patients experienced at least one complication. However, the severity is not mentioned. Complications can range from benign postoperative arrhythmias to significant events such as cerebral or myocardial events

It would also be interesting to specify if there were improvements in the incidence of complications that could be related to technical errors or level of surgical expertise, such as hemoptysis, or residual pulmonary hypertension post-op (mPAP >25 and/or PVR >400)

Thank you!

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