

# Reevaluating Surgical Thrombectomy in Massive Pulmonary Embolism: Reflections on a Recent Case Report

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### Dear Editor,

We were intrigued by the article published by Fernandez Bravo in 2025 that reported on the extensive pulmonary thrombectomy performed on a patient with Acute Massive Pulmonary Embolism. The patient, a 56-year-old man, had an excellent result following surgical embolectomy using advanced imaging techniques to identify the emboli. While we appreciated the detailed imaging results and description of the operative procedure, the case illustrates the importance of recognizing and treating massive PE quickly through mechanical means.

Current guidelines stress the need for rapid risk stratification and treatment of acute PE [1-3]. Patients with massive PE, which is classified as having sustained hypotension or shock, have a high risk of mortality, hence immediate reperfusion treatment is generally recommended to save lives [1-3]. The primary treatment for most patients who experience massive PE and do not have contraindications to thrombolysis is systemic thrombolysis [1-3,6]. Pulmonary embolectomy remains the traditional option for those patients who failed thrombolysis or have absolute contraindications against using thrombolytics [1-3].

In using their clinical decision to pursue surgical thrombectomy rather than thrombolysis for this patient, we ask the authors to clarify which criteria led to their decisions to align with current guidelines.

The authors have demonstrated a high degree of technical skill in performing the embolectomy. Rapidly performing a thrombus removal via surgical embolectomy

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allows for rapid restoration of pulmonary circulation and improvement in the right ventricle, as seen here. The improvement seen with this patient is similar to prior experience where modern surgical embolectomy techniques have had favorable results in patients with massive PE [4,5]. For instance, Leacche et al. have shown that rapid embolectomy results in low operative mortality in high-risk PE patients [4]. Similarly, Kadner et al. reported good postoperative outcomes for massive PE surgery [5].

Surgical embolectomy still has major limitations, including its very invasive nature with the need for cardiopulmonary bypass and its associated risks of bleeding and organ failure. It would be helpful if the authors discussed some of the peri operative management techniques that they utilized in order to decrease the likelihood of these complications occurring.

This case report provides important information about the role of surgical thrombectomy in a complex medical situation. It clearly provides essential information regarding the imaging diagnosis, surgical technique, and postoperative management of patients undergoing surgical thrombectomy. We believe that a formal discussion of the guideline directed decision making process, and consideration of an alternative therapy option (thrombolysis), would enhance the educational value of this report. The continued documentation of the different treatment options for these high-risk pulmonary embolism patients will allow greater familiarity with the optimal

management plans for patients with similar disease processes.

### Statements and Declarations

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### References

1. Konstantinides SV, Meyer G, Becattini C, et al. 2019 ESC Guidelines for the diagnosis and management of acute pulmonary embolism. *Eur Heart J*. 2020; 41(4): 543-603.
2. Jaff MR, McMurtry MS, Archer SL, et al. Management of massive and submassive pulmonary embolism. *Circulation*. 2011; 123(16): 1788-830.
3. Kearon C, Akl EA, Ornelas J, et al. Antithrombotic therapy for VTE disease: CHEST guideline and expert panel report. *Chest*. 2016; 149(2): 315-52.
4. Leacche M, Unic D, Goldhaber SZ, et al. Modern surgical treatment of massive pulmonary embolism. *J Thorac Cardiovasc Surg*. 2005; 129(5): 1014-20.
5. Kadner A, Schmidli J, Schönhoff F, et al. Excellent outcome after surgical treatment of massive pulmonary embolism. *Ann Thorac Surg*. 2010; 90(4): 1130-6.
6. Wan S, Quinlan DJ, Agnelli G, et al. Thrombolysis compared with heparin for the initial treatment of pulmonary embolism. *N Engl J Med*. 2004; 350(3): 225-37.

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