

Massive Pulmonary Embolism with Cardiac Arrest During Routine Tibial Bypass Surgery

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Management of pulmonary embolism (PE) is a rapidly evolving topic with an increasing focus on endovascular interventions. Historically, massive PE was treated with systemic thrombolysis despite a significant risk of major bleeding, including intracranial hemorrhage. Recent evidence shows fewer complications and lower mortality for catheter-directed thrombolysis compared with systemic thrombolysis.

We report the case of a massive PE with intra-operative cardiac arrest in a 48-year-old male during routine surgical tibial bypass successfully managed by rapid diagnosis and catheter-based interventions. The patient was removed from inotropic support by the fourth postoperative day and went on to complete successful tibial bypass one week following cardiac arrest. He was discharged home two weeks post-arrest in excellent condition.

Our experience supports the trending shift in pulmonary embolism therapy guidelines to include endovascular approaches and emphasizes the need for vascular surgeons to adapt their training protocols. Vascular surgeons often use these devices in the periphery and expanding this skillset to the management of PE will increase their value as providers, position them to be leaders in the field, and improve patient care.