

Fatal systemic embolism caused by prosthetic valve endocarditis after Bentall surgery

Shaofeng Wu¹, Xin Wang¹, Xiaona Yu¹, Weidong Ren¹, Guang Song¹, Yang Hou², and Haidi Hu¹

¹Shengjing Hospital of China Medical University

²Shengjing Hospital of China Medical University Department of Radiology

June 17, 2022

Abstract

Background: Prosthetic valve endocarditis (PVE) is a rare but dangerous complication after Bentall surgery. In addition, cases of *Staphylococcus epidermidis* involving multiple valves simultaneously and multi-organ embolism during the early postoperative period are rarer. **Case presentation:** We reported a 42-year-old patient who developed PVE with systemic embolism one month after aortic valve replacement (Bentall surgery). Echocardiography suggested large, mobile vegetations on both the prosthetic aortic valve and native tricuspid valve. The patient immediately received antibiotic treatment after the presence of *Staphylococcus epidermidis* was revealed by multiple blood cultures. Shortly after that, the patient felt numbness in the right lower extremity and received a vascular ultrasonography examination. The Pathological exam revealed right femoral artery thromboembolism. The patient also developed cerebral and splenic infarction during follow-ups and died of cerebral infarction. **Conclusions:** We reported a sporadic case of *Staphylococcus epidermidis* infective endocarditis (IE) involving multiple valves and systemic embolisms early after Bentall surgery in a patient with Marfan's syndrome. Fatal systemic embolism should be aware of in PVE patients with large vegetations present with dyskinesia, abdominal pain, and limb numbness. The prompt echocardiography and vascular ultrasound are primary and reliable diagnostic methods in this scenario.

Hosted file

manuscript.docx available at <https://authorea.com/users/489879/articles/573400-fatal-systemic-embolism-caused-by-prosthetic-valve-endocarditis-after-bentall-surgery>



