

Late ventricular apical pseudoaneurysm with subcutaneous abscess formation after transapical aortic valve implantation

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Late pseudoaneurysms following transapical transcatheter aortic valve implantation are rare but may lead to a fatal outcome.^{1–3} An 84-year-old male patient was referred to our chest pain unit by his general practitioner with a progressive pulsatile mass in the left perimammary region that was first detected about 2 weeks prior. Transapical aortic valve implantation (Edwards Sapien 3, 23 mm) was performed 4 years earlier. At that time, the complication of intraoperative left ventricular apex bleeding occurred and was treated by reinforcing the apex with felt strips. Apart from the pulsatile mass in the left thoracic region (Video 1), the initial physical examination was normal. In comparison to previous electrocardiograms, no signs of

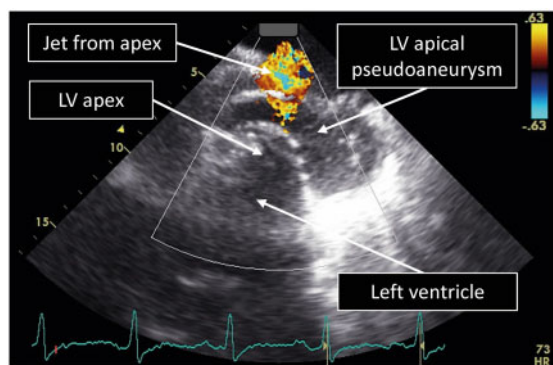


Figure 1 Echocardiography. Transducer on top of pulsatile mass on left chest shows jet from left ventricular apex into pseudoaneurysm. LV, left ventricle.



Video 1 Pulsatile left ventricular mass during initial presentation in chest pain unit.

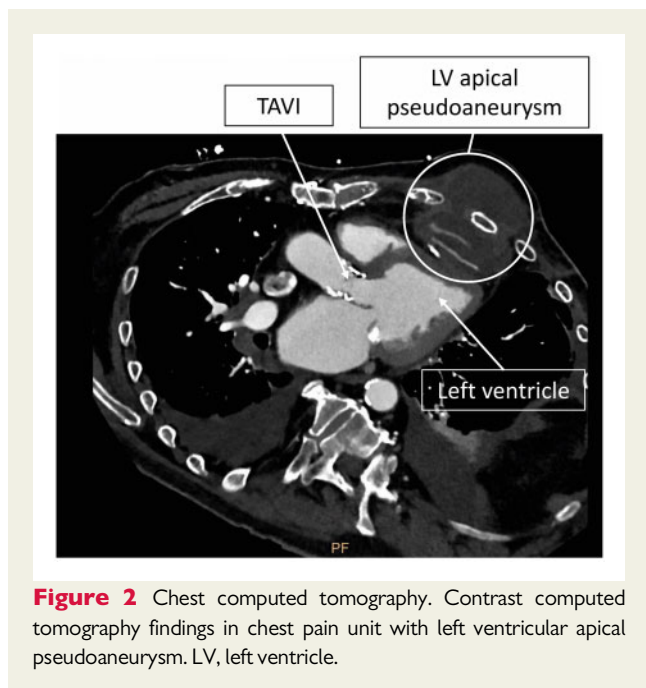
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acute myocardial ischaemia could be found. Blood analysis showed increased inflammatory markers and high-sensitive cardiac troponin T of 43 pg/mL. Echocardiography revealed a covered ventricular

perforation of the left ventricular apex with associated fluid-filled cavity (Figure 1). A chest computed tomography was performed to further evaluate and plan the intervention. Here, findings were consistent with a septic left ventricular pseudoaneurysm (Figure 2). Urgent cardiac surgery was performed in order to drain and resect the abscess formation. Unfortunately, the patient died during surgery caused by combined cardiogenic and septic shock. This highlights the relevance for prompt presentation in the presence of these clinical findings.

Consent: The authors confirm that written consent was obtained from the patient and from the next of kin for the publication of this case and accompanying images in line with COPE guidance.

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