

Videoscopic-assisted removal of a left ventricular mass in an octogenarian

Sana Ghafoor Rahman, Atiq Rehman

Department of Cardiovascular Surgery, Our Lady of Lourdes Medical Center, Camden, New Jersey, USA

Correspondence to
Dr Atiq Rehman,
atiqmd@aol.com

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DESCRIPTION

An 85-year-old female with history of hypertension, diabetes, coronary artery disease and emphysema presented with episodes of confusion. MRI demonstrated bilateral acute infarcts. She had non-ST elevation myocardial infarction and underwent percutaneous intervention with drug-eluting stent for left anterior descending artery stenosis. Transthoracic echocardiography (TTE) (see online supplementary video 1) and transoesophageal echocardiography (TEE) demonstrated calcified left ventricular mass (LVM) (see online supplementary video 2), severe mitral annular calcification and moderate mitral stenosis (figure 1). Forced expiratory volume in one second 0.89 (85% of predicted), forced vital capacity 1.01 (69% of predicted) and frail body habitus. Multidisciplinary discussions (MDD) with family and they agreed to video-assisted LVM removal.^{1,2} Double lung ventilation was initiated, peripheral cardiopulmonary bypass (CPB) instituted through femoral vessels, ventilation stopped and resumed at the end of CPB. A 4 cm right intercostal incision performed and 10 mm video-scope inserted through separate 12 mm port. After cross-clamp, induction antegrade cardioplegia administered through aortic root and repeated at 15 min interval. Left atriotomy performed. Ventricular mass exposure (figure 2), resection and complete removal facilitated by video-scope (figure 3). Total cross-clamp time 36 min. Patient underwent uneventful surgery. Initially, patient woke up and was extubated. Postoperative (POP) TTE demonstrated no LVM (online Supplementary video 3). Final pathology revealed mass



Figure 1 3D transoesophageal echocardiography demonstrating severe mitral annular calcification and moderate stenosis.

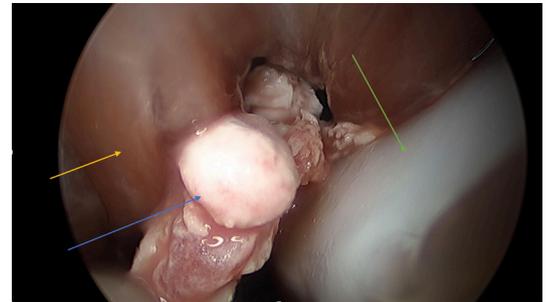


Figure 2 Yellow arrow—lateral ventricular wall. Blue arrow—ventricular mass. Green arrow—papillary muscle.



Figure 3 Yellow arrow—papillary muscle with mass removed.

as calcified amorphous tumour. Next 24 hours, she had respiratory decompensation leading to reintubation. POP course complicated by atrial fibrillation, failure to thrive and adult respiratory distress syndrome (ARDS). Patient continued to be stable haemodynamically, however, unable to wean from ventilator secondary to ARDS; potentially requiring a tracheostomy. MDD with family led to decision for patient's comfort care as per her living will.

Learning points

- ▶ Ventricular masses can be resected with videoscopic-assisted approach.
- ▶ It is a feasible approach in octogenarians and complex patients.
- ▶ These patients need to be addressed with a multidisciplinary approach.

Contributors AR performed the surgery and SGR collected the patient data, formulated the clinical image report and obtained the patient consent form.

Competing interests None declared.

Patient consent Obtained.



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