Composed aortic root replacement and left ventricular outflow tract reconstruction with translocated valve graft in a prosthesis infective endocarditis 🚳

A 45-year-old female patient was admitted to the hospital because she presented with recurrent fever, chill, fatigue, and edema due to prosthesis infective endocarditis. Ten years prior, she had undergone mitral valve and aortic valve replacement using St. Jude mechanical valves (St. Jude Medical, St. Paul, MN, United States) as well as tricuspid annuloplasty due to severe rheumatic heart disease. Preoperative transthoracic echocardiography (TTE) and intraoperative transesophageal echocardiography (TEE) showed a severe perivalvular leakage (PVL) on the aortic valve (Supplementary Videos 1 and 2). Due to the derogative aortic annulus as well as fragility of the myocardium of left ventricular outflow tract (LVOT) because of abscess formation, she underwent composed aortic root replacement and LVOT reconstruction with a tube graft assembled by a translocated St. Jude R 19 mm mechanical valve (St Jude Medical, St Paul, Minn) and a 24 mm Gelweave prosthetic vessel graft (Vascutek Ltd, Inchinnan, United Kingdom). Translocation of prosthetic aortic valve (floating technique) was conducted to avoid the recurrence of PVL and lessen the possibility of a patient–prosthesis mismatch (PPM) (Fig. 1). The postoperative mean pressure gradient across the aortic valve was 30 mm Hg. There was no perivalvular leak-



Figure 1. Diagram of the surgical procedure. The mechanical valve was translocated and assembled with prosthetic vascular graft. Coronary arteries were then reconstructed to the tube graft



Figure 2. Postoperative CT reconstruction of LVOT. The black arrow indicated the translocation of mechanical aortic valve



Supplementary Figure 1. Intraoperative photo of surgical procedure. The asterisk indicated a ring-like sub-valvular tissue

age by postoperative TTE (Supplementary Videos 3 and 4), and computed tomography showed that the valved conduit remained in situ (Fig. 2). The postoperative tissue culture showed the colonization with intermediate *Streptococcus*.



Supplementary Figure 2. Intraoperative photo of surgical procedure. The asterisk indicated a ring-like sub-valvular tissue



Supplementary Figure 3. Intraoperative photo of surgical procedure. The asterisk indicated a ring-like sub-valvular tissue

Ethics approval: This paper was approved by the Hospital Ethics Committee.

Informed consent: Written informed consent was acquired from the patient for the publication.



Supplementary Figure 4. Illustration of the severely damaged aortic annulus

Video 1. Regular intraoperative TEE Video 2. Intraoperative TEE with Doppler imaging Video 3. Regular postoperative TTE Video 4. Postoperative TTE with Doppler imaging

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Multimodality imaging of a thymoma within the superior venae cava extending into the right atrium **(%)**.

A 44-year-old female with facial edema and dizziness for six months was admitted to our hospital. Transthoracic echocardiogram showed the dilated superior venae cava (SVC) occluded by a mass. The mass in the SVC was extending into the right atrium (RA) (Fig. 1a–1c, Videos 1-2). Color Doppler flow imaging indicated a narrowed blood flow in the SVC with an increased velocity of 1.6 m/s (Fig. 1d, 1e, Video 3). Contrast-enhanced computed tomography (CT) scan revealed a soft tissue density mass mea-