

Leaflet Tear of Trifecta Bioprosthesis



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A 69-year-old man was admitted on an emergency basis with progressive dyspnoea. He had undergone aortic valve replacement and had a 23 mm Trifecta bioprosthetic valve (Abbott, St. Paul, MN, USA) implanted for severe aortic regurgitation 4 years

previously and his ascending aorta had been replaced due to type A acute aortic dissection 10 months previously. Transthoracic and transoesophageal echocardiography showed prolapse of a cusp and new severe aortic transvalvular regurgitation with

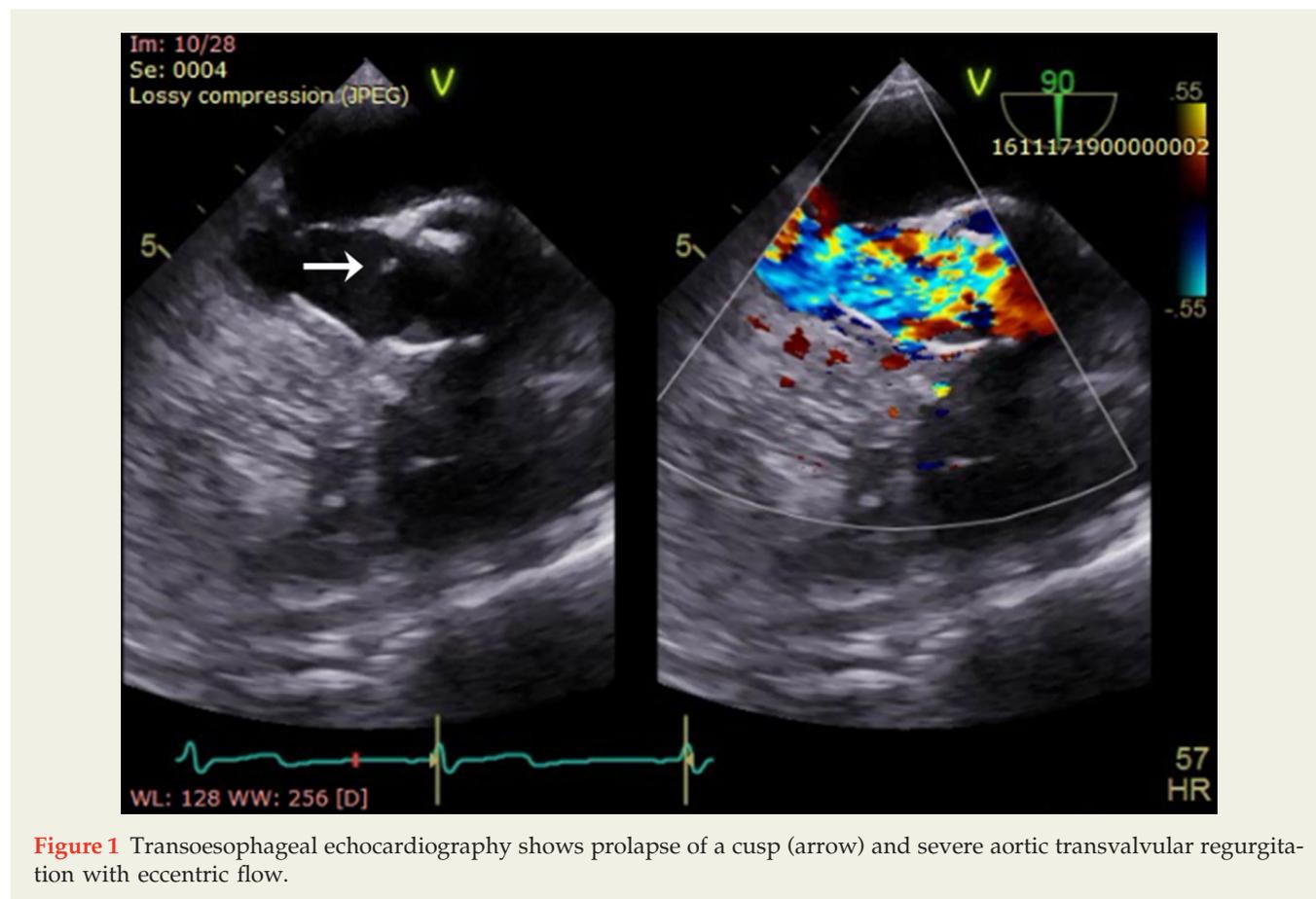


Figure 1 Transoesophageal echocardiography shows prolapse of a cusp (arrow) and severe aortic transvalvular regurgitation with eccentric flow.

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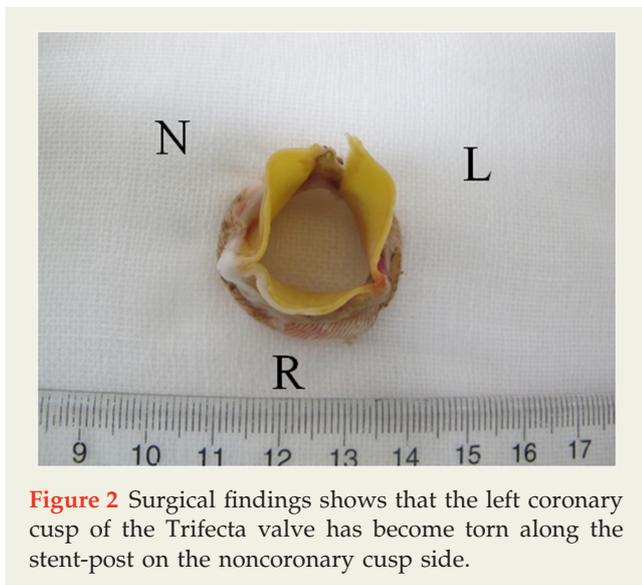


Figure 2 Surgical findings shows that the left coronary cusp of the Trifecta valve has become torn along the stent-post on the noncoronary cusp side.

eccentric flow (Figure 1). The Trifecta valve was immediately replaced with a 23 mm Carpentier Edwards PERIMOUNT Magna Ease (Edwards Lifesciences, Irvine, CA, USA). The surgical findings showed that the left coronary cusp of the Trifecta valve had become torn along the stent-post on the noncoronary cusp side (Figure 2). The patient's course during follow-up was uneventful.

A mid-term follow-up Kaplan–Meier analysis of 918 patients with Trifecta valves at a single centre found 97.9%

freedom from structural valve deterioration at 5 years [1]. However, several case reports have recently emerged that call into question the long-term durability of the Trifecta valve [2,3]. Further mid- and long-term follow-up data are needed to confirm the durability of the Trifecta valve.

Author Contributions

M.H. and M.K. came up with the concept for this presentation. M.H. wrote the manuscript. All authors critically reviewed and revised the manuscript and approved it for publication.

Conflict of Interest

None declared.

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