# **IMAGES AND VIDEOS**

# Stuck on a diagnosis: prosthetic mitral valve thrombosis vs dyssynchrony

Patrick Savage MB BCh BAO BSc MRCP and Michael Connolly MRCP MD

Cardiology, Craigavon Area Hospital, Portadown, UK

Correspondence should be addressed to P Savage: psavage05@qub.ac.uk

# **Summary**

Prosthetic valve thrombosis is a rare but serious complication of mechanical valve replacement requiring prompt diagnosis and treatment. Unfortunately, it is often difficult to evaluate this based on single modality imaging alone. We demonstrate a case where the use of both 3D-TOE and valve fluoroscopy allowed for the differentiation between prosthetic valve thrombosis prosthetic mitral valve dyssychrony. transoesphageal echocardiography, it is noted that there is valve dyssynchrony; however, it is unclear if there is leaflet restriction (Video 1). Using fluoroscopy, it can be seen clearly that their overall mobility is normal (Video 2). Additionally, using 3D-TOE it can be clearly noted that there is no evidence of pannus or thrombus (Video 3). Using these two imaging modalities in concert facilitated the clear diagnosis of valve dyssynchrony vs valve thrombosis.

### Video 1

Transoesophageal echocardiography demonstrating mobile prosthetic mitral valve leaflets with dyssynchronous closure. View Video 1 at http://movie-usa.glencoesoftware.com/video/10.1530/ERP-20-0012/video-1.

### Video 2

Valve fluoroscopy demonstrating prosthetic mitral and aortic valve replacement. Of note, the mitral valve (on the right hand side) demonstrates dyssynchronous closure of both leaflets. View Video 2 at http://movie-usa.glencoesoftware.com/video/10.1530/ERP-20-0012/video-2.

### Video 3

3D-Transoesophageal echocardiography demonstrating mobile prosthetic mitral valve leaflets with dyssynchronous closure. Of note, there is no evidence of pannus or thrombus. View Video 3 at http://movie-usa.glencoesoftware.com/video/10.1530/ERP-20-0012/video-3.

### **Declaration of interest**

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of this article.

## **Funding**

This work did not receive any specific grant from any funding agency in the public, commercial or not-for-profit sector.

### Patient consent

Written informed consent for publication of their clinical details and/or clinical images was obtained from the patient/parent/guardian/relative of the patient.

Received in final form 26 June 2020 Accepted 28 July 2020 Accepted Manuscript published online 29 July 2020

