Stuck on a diagnosis: prosthetic mitral valve thrombosis vs dyssynchrony

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 vs prosthetic mitral valve dyssynchrony. Using transoesophageal 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

Video 2

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.

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