# **Clinical Case Reports**

### CLINICAL VIDEO

## A "tilt" toward cinefluoroscopy

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#### **Key Clinical Message**

Fluoroscopy permits rapid and straightforward assessment of mechanical valve function and allows a distinction between normal and malfunctional prostheses, acting as a complementary diagnostic step.

#### Keywords

Aortic valve prosthesis, aortic valve replacement, fluoroscopy, mechanical valve.

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## **Does this Valve Work Properly?**

A 68-year-old man presented to the emergency department of our hospital complaining of dyspnea. His medical history included an aortic valve replacement (Sorin Carbomedics 19 mm) 9 years ago because of *Staphylococcus lugdunensis*-related infective endocarditis. Transthoracic and transesophageal echocardiography showed a dilated left ventricle with mildly depressed systolic function and severe aortic regurgitation with large paravalvular leakage. No evidence of vegetation or abscess formation was noted. Cinefluoroscopic imaging revealed abnormal, tilting motion of the aortic valve while normal mobility of the occluder was noted (Video S1). Cinefluoroscopy is recommended in guidelines as possible tool for investigating these cases [1].

## Authorship

KL: involved in management of the patient, performed major revision, and approved the final manuscript. AB: involved in management of the patient, performed major revision, and approved the final manuscript. GB: involved in management of the patient, wrote the first draft, and approved the final manuscript. AS: involved in management of the patient, performed major revision, and approved the final manuscript. AS: involved in management of the patient, performed major revision, and approved the final manuscript. AA: involved in management of the patient, performed major revision, and approved the final manuscript. GT: performed major revision, and approved the final manuscript. MT: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manuscript. CC: involved in management of the patient, performed major revision, and approved the final manu-

## **Conflict of Interest**

None declared.

#### References

1. Lancellotti, P., P. Pibarot, J. Chambers, T. Edvardsen, V. Delgado, R. Dulgheru, et al. 2016. Recommendations for

the imaging assessment of prosthetic heart valves: a report from the European Association of Cardiovascular Imaging endorsed by the Chinese Society of Echocardiography, the Inter-American Society of Echocardiography, and the Brazilian Department of Cardiovascular Imaging. Eur. Heart J. Cardiovasc. Imaging 17:589–590.

## **Supporting Information**

Additional Supporting Information may be found online in the supporting information tab for this article:

**Video S1.** Cinefluoroscopic imaging revealed abnormal, tilting motion of the aortic valve while normal mobility of the occluder was noted.