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“Ripples in Water” Effect Detected by Ultrasound During Internal Jugular Catheterization



To the Editor:

Herein, I describe an interesting “ripples in water” effect in the right internal jugular vein using ultrasound guidance before its catheterization. A 54-year-old male with severe mitral stenosis, tricuspid regurgitation, pulmonary artery hypertension, and atrial fibrillation, was scheduled for mitral valve replacement. After the induction of anesthesia, the patient was positioned and prepared for a right internal jugular vein catheterization under ultrasound guidance. An ultrasound assessment revealed stasis of blood in the vessel and a “ripples in water” effect in a cross-

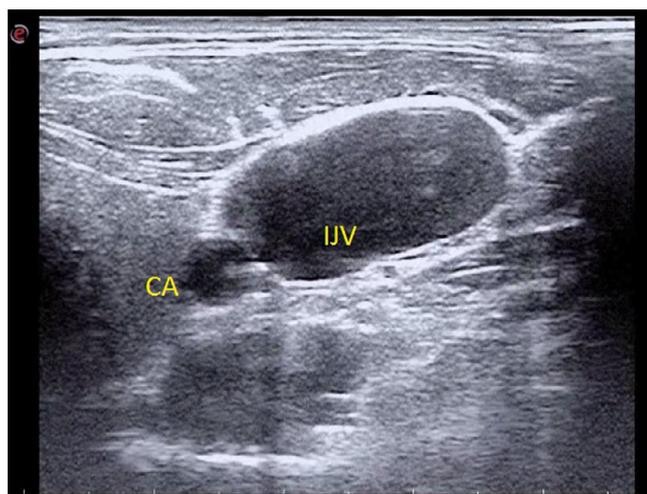


Fig 1. Ultrasound in a cross-sectional view showing venous stasis in the right internal jugular vein. CA, carotid artery; IJV, internal jugular vein.

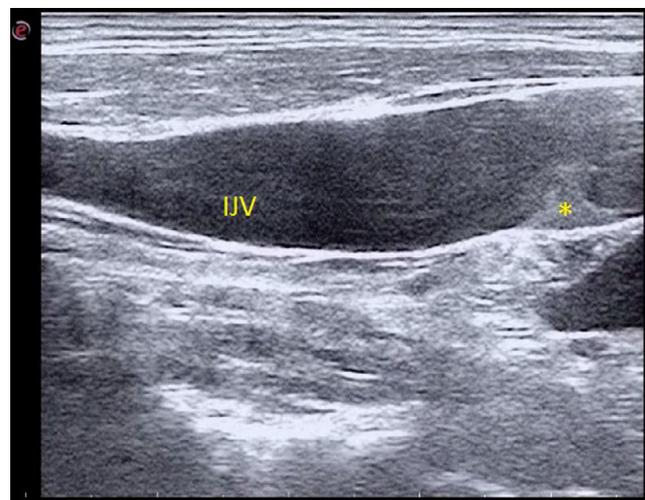


Fig 2. Ultrasound in a longitudinal view showing a valve with thrombus (*) in the right internal jugular vein. IJV, internal jugular vein.

sectional view (Fig 1; Video 1). Interrogation in a longitudinal view revealed the presence of a valve with thrombus, located more caudad (Fig 2; Video 2). This valve appeared to be fluttering because of the backward flow of blood into the vein from the right atrium due to elevation of the right ventricle end-diastolic pressure and a severe tricuspid regurgitant jet.¹

Conflict of Interest

None.

Supplementary materials

Supplementary material associated with this article can be found in the online version at [doi:10.1053/j.jvca.2022.06.034](https://doi.org/10.1053/j.jvca.2022.06.034).

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Andexanet Alfa-Induced Heparin Resistance Missing From SCA Blood Management in Cardiac Surgery Guidelines



To the Editor:

Current 2021 Society of Cardiovascular Anesthesiologists (SCA) guidelines recommend giving novel oral anticoagulant-