



Effusive-Constrictive Pericarditis

MULTIMODALITY
MUSEUM IMAGE

JAD ZEITOUN, MD

YEVA FAKIH, MD

SHAHRUKH KHAN, MD

TAHA JILANI, MD

MAAN MALAHFJI, MD

**Author affiliations can be found in the back matter of this article*

HOUSTON
Methodist
DEBAKEY HEART &
VASCULAR CENTER

ABSTRACT

Multimodality imaging is used to diagnose a patient with prior acute pericarditis and demonstrated effusive-constrictive physiology characterized by pericardial thickening with effusion, pericardial enhancement consistent with active inflammation, and ventricular interdependence. These findings highlight the complementary role of cardiac magnetic resonance in the diagnosis and management of inflammatory constrictive pericardial disease.

CORRESPONDING AUTHOR:

Maan Malahfji, MD

Houston Methodist DeBakey
Heart & Vascular Center,
Houston Methodist, Houston,
Texas, USA

mmalahfji@houstonmethodist.org

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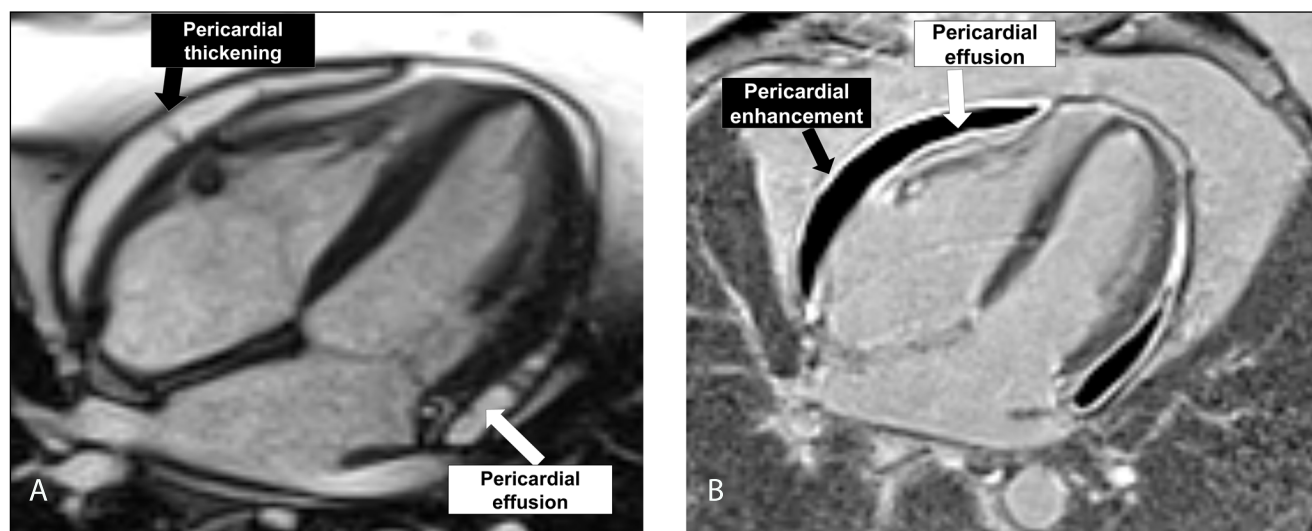
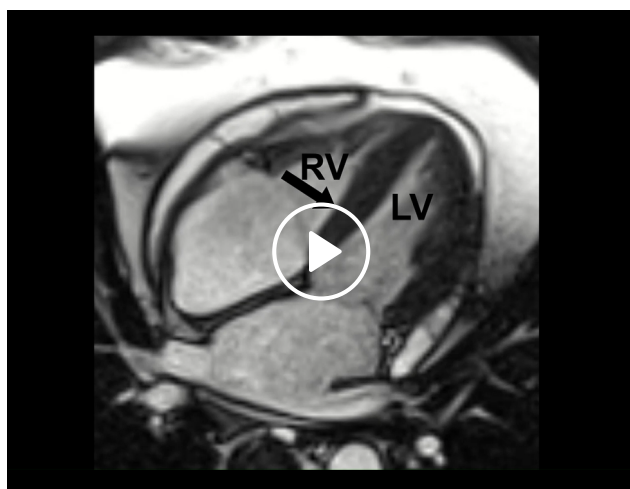
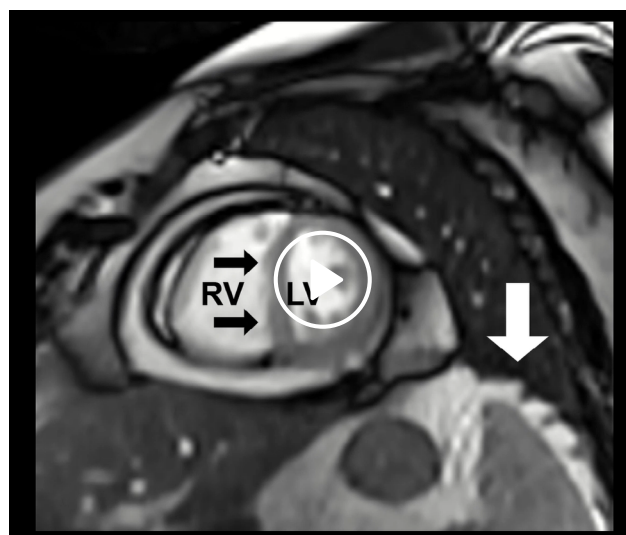


Figure 1 (A) Cardiac magnetic resonance imaging (MRI) 4-chamber view demonstrates pericardial thickening with associated pericardial effusion and focal adhesions. **(B)** Post-contrast cardiac MRI demonstrates a pericardial effusion with circumferential pericardial enhancement reflecting active inflammatory involvement.



Video 1 Cine cardiac magnetic resonance imaging demonstrates paradoxical interventricular septal motion during systole; see also at <https://vimeo.com/1162244467/fc43fe2a45>.

A 58-year-old man presented to the clinic with a 1-month history of bilateral leg edema, abdominal swelling, and shortness of breath. He was diagnosed with acute pericarditis 4 months earlier and treated with ibuprofen. The exam demonstrated jugular venous distension and bilateral leg edema. Echocardiography showed a pericardial effusion, normal biventricular function, paradoxical septal motion, and dilated inferior vena cava. Cardiac magnetic resonance imaging (MRI) demonstrated pericardial thickening (4 mm), pericardial effusion with adhesions, and paradoxical septal motion (Figure 1A, Video 1). Contrast enhancement of the pericardium indicated inflammation (Figure 1B) and revealed interdependence of the ventricles on respiration (Video 2). The patient was treated with ibuprofen, colchicine,



Video 2 Cine cardiac magnetic resonance imaging demonstrates ventricular interdependence with pronounced respirophasic septal shift, consistent with constrictive physiology; see also at <https://vimeo.com/1162246089/a9ce113cf0>.

and corticosteroids. Effusive constrictive pericarditis can complicate pericarditis, particularly if not sufficiently treated, but may resolve with anti-inflammatory therapy. The patient had resolution of pericardial enhancement on follow-up imaging but had persistent pericardial thickening and constriction. He underwent successful pericardiectomy and was well at 6-month follow-up.

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR AFFILIATIONS

Jad Zeitoun, MD  orcid.org/0009-0002-9787-0506

Division of Cardiovascular Imaging Research, Department of Cardiology, Houston Methodist Hospital, Houston, Texas, USA

Yeva Fakih, MD  orcid.org/0009-0002-3069-9759

Division of Cardiovascular Imaging Research, Department of Cardiology, Houston Methodist Hospital, Houston, Texas, USA

Shahrukh Khan, MD  orcid.org/0009-0007-4749-4844

Department of Medicine, Houston Methodist Hospital, Houston, Texas, USA

Taha Jilani, MD  orcid.org/0000-0001-6090-6099

Department of Medicine, Houston Methodist Hospital, Houston, Texas, USA

Maan Malahfji, MD  orcid.org/0000-0002-2701-8783

Houston Methodist DeBakey Heart & Vascular Center, Houston Methodist, Houston, Texas, USA

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