

## Clinical Image

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# Acute anterior myocardial infarction complicated by a large ventricular septal defect

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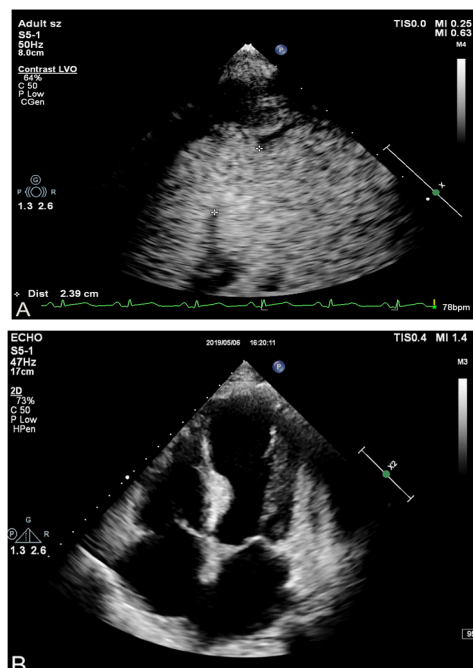
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### Clinical image description

Post-Infarction Ventricular Septal Defect (PIVSD) are a rare complication of Acute Myocardial Infarction (AMI). According to clinical guidelines, surgical repair of a PIVSD is the recommended acute-stage course of treatment. Nevertheless, thoracotomy is not always clinically suggested for patients with unstable hemodynamics and otherwise at high risk. Currently, percutaneous interventional closure of a PIVSD represents an alternative therapy, and an attractive option for particular patients [1,2]. Here we report a 67-year-old man was transferred to Shenzhen Sun yat-sen Cardiovascular Hospital to evaluate a PIVSD and undergo repair. Echocardiography confirmed a large Ventricular Septal Defect (VSD) and significant left-to-right shunt (Figure 1a). Few reports of the closure of a PIVSD at an acute/subacute stage have been previously published. An interventional closure treatment (Amplatzer Septal Occluder device) was successfully performed after bridging to a subacute stage through use of mechanical circulatory backup (Figure 1b).



**Figure 1:** Ultrasound Molecular Imaging and Echocardiogram in an Elderly Male Smoker with Ventricular Septal Defect.

**(A):** Short axis showing a direct ventricular septal defect, VSD measuring 20 mm on the left ventricular side;

**(B):** Post-percutaneous procedure reexamination: Occluder device was in normal position, a little residual shunt at the edge of the occluder (length 11mm, crescent shape, width 1mm).

### Declarations

**Ethics approval and consent to participate:** Ethics approval for the study was given by Fu Wai Hospital Shenzhen Hospital. ChiCTR2100043897.

**Consent for publication:** The report was approved by the ethics review committee of our institution (Fu Wai Hospital Shenzhen Hospital, Guangdong) and consent was obtained from the patient and his family for their personal or clinical details along with any identifying images to be published in this study.

**Availability of data and materials:** All available information is contained within the present manuscript.

**Competing interests:** The authors declare that they have no competing interests.

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**Authors' contributions:** YM, CQ and LQ were involved in compilation of data and major contributors writing the manuscript. CQ performed the transthoracic echocardiogram and follow up. LQ performed the myocardial perfusion imaging. All authors have read and approved the submitted manuscript

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