A 49-year-old man presented with a stab wound to the left chest. On physical examination, he had jugular venous distention and distant heart sounds; a trauma ultrasound showed a large pericardial effusion. Emergency thoracotomy revealed a large amount of blood and clot in the pericardial space and rapid hemorrhage from a laceration of the right ventricular free wall that was repaired with sutures. A transthoracic echocardiogram the next day revealed a large muscular ventricular septal defect. A follow-up transesophageal echocardiogram confirmed the presence of a muscular ventricular septal defect (Figure 1 and Movie I in the online-only Data Supplement), but it also surprisingly demonstrated a nearly full-thickness laceration of the posterior wall of the left ventricle (Figure 2 and Movie II in the online-only Data Supplement).

**Figure 1.** Muscular ventricular septal defect. (A) The Doppler flow across the interventricular septum lies directly beneath the site of right ventricular laceration that had been repaired surgically. (B) The course of the laceration can be seen at 90 degrees. LA indicates left atrium; RV, right ventricle; LV, left ventricle; RVOT, right ventricular outflow tract.
Supplement). The injuries were seen aligned along the trajectory of the stab wound (Figure 3). The ventricular septal defect and posterior left ventricle laceration were both managed conservatively, and the remainder of the patient’s hospital course was uneventful.

Penetrating cardiac trauma has a high mortality due to tamponade or exsanguination. Although right ventricular lacerations and ventricular septal defects are well-described complications of stab wounds, posterior left ventricle lacerations are usually diagnosed at autopsy. Diagnosis has important clinical consequences, because this defect can be repaired surgically with placement of sutures or fibrin glue. These findings suggest that transesophageal echocardiogram should be performed in all survivors of penetrating cardiac trauma to guide initial treatment and diagnose previously unrecognized complications.

Disclosures
None.

References
Traumatic Laceration of the Posterior Left Ventricle Diagnosed by Transesophageal Echocardiography
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Circulation. 2011;123:e634-e635
doi: 10.1161/CIRCULATIONAHA.111.024380
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
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Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/123/24/e634

Data Supplement (unedited) at:
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