

# Role of Transesophageal Echocardiogram in Post-CABG Complication

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## Background:

Post-operative hematoma is a well-known complication of coronary artery bypass graft surgery (CABG), but significant hematoma causing cardiac tamponade is rare and associated with high mortality. Urgent diagnosis and evacuation are essential for a full recovery.

## Case:

A 61-year-old male with past medical history of hypertension and stroke who sought medical care due to chest pain. Patient was diagnosed with NSTEMI-ACS and was found to have triple vessel disease. He underwent off-pump CABG using left internal mammary arteries and left greater saphenous vein. Few hours after the procedure, the patient developed cardiogenic shock that required inotropes and mechanical circulator support. An urgent transthoracic echocardiogram was not helpful due to bad acoustic window secondary to thoracotomy wound. After that, stat transesophageal Echocardiogram (TEE) was performed which showed a large circumferential pericardial effusion with large hematoma compressing the right ventricle and atrium (5.6 x 6.2 cm), causing acute tamponade. (Figure 1 A-B). An urgent transthoracic echocardiogram was requested, but we could not obtain good pictures. Hence, the plan was to proceed with an urgent transesophageal Echocardiogram (TEE). The patient was taken back to the operating room and underwent an emergent successful hematoma evacuation. After the operation patient hemodynamically improved. The balloon bump was safely removed. The patient made it to full recovery.

## Decision-Making:

The patient developed acute post-operative shock. TTE was limited due to thoracotomy wound. TEE was pursued, and it helped to reach a final diagnosis.

## Conclusion:

The case highlighted the importance of the rapid recognition and treatment for acute post-cardiac hematoma and the role of the TEE in reaching the final diagnosis.

