



Case Report: Diagnosing Tamponade Physiology Following an Orthotopic Heart Transplant Using a Miniaturized TEE probe



S Elapavaluru, P Linden, J Rossi, S Bailey, R Moraca, W McGregor, H Hastings¹, R Benza, S Murali
Cardiovascular Institute, Allegheny Health Network, Pittsburgh PA 1. Hofstra Univ and Imacor

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Introduction: Miniaturized TEE probe revealed large clot as cause of hemodynamic instability following orthotopic heart transplant.

Case Report:

- 52 year-old-male, heart tx, following LVAD explant.
- Intra-op: mild RV dysfunction, profound vasoplegia, mild coagulopathy. Chest left open.
- Transferred to CTICU with low CO (CI 1.2-1.6 l/min/m², SVO₂ 48-51%, CVP 18 mmHg) despite extensive support: epi, norepi, vasopressin, dobutamine, milrinone, IABP and iNO.
- Mini TEE probe (hTEE, Imacor, Garden City, NY, USA) placed to determine cause of instability, revealed large clot compressing LA. Immediate re-exploration, clot removed at bedside.
- Hemodynamics improved immediately with increase in CI and SCVO₂. Pt had good outcome, closed one day later, transferred to step down POD 8, discharged POD 13.



Conclusions:

- hTEE led to rapid diagnosis of tamponade physiology in unstable pt, resulting in immediate removal of clot.
- hTEE guided rapid weaning of pressors.
- Easy to place at bedside w/o echocardiologist.
- Replaced conventional TEE, which might be risky in coagulopathic patient.
- Added additional level of safety.
- Reduced OR time, reducing ICU LOS, offering potential cost savings.