

# Transesophageal echocardiography in the intensive care unit: Impact on diagnosis and decision-making

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## **Abstract**

Transesophageal echocardiography (TEE) is widely used in the management of patients in intensive care units. The present study assesses the specific value of this technique in various categories of these patients. We reviewed 113 studies performed in 100 such patients for: suspected aortic dissection (25), suspected endocarditis (33), source of emboli assessment (19), hemodynamic instability (15), and miscellaneous (21). TEE provided diagnostic information in all patients with aortic dissection, in 53% of the cases with hemodynamic instability, in 50% of the cases with septic states with high likelihood of endocarditis, and in 29% of the cases where the question was the source of emboli. When the clinical probability for endocarditis was low, all transesophageal echocardiograms performed in septic patients were negative. The information provided by TEE was considered crucial in one-third of the positive cases; in about one-half of these special cases, the results were instrumental for further surgical management. There were no significant side effects related to the procedure. TEE is easily performed in the intensive care unit setting and yields useful information in almost half of the cases. Special benefit is expected in suspected aortic disease, hemodynamic instability, suspected endocarditis, and embolic events. The overall yield as screening procedure in febrile patients is low.

## **Keywords**

Echocardiography, transesophageal, intensive care, aortic dissection, emboli, endocarditis, hypotension