Comparison of Intracardiac Echocardiography with Transesophageal Echocardiography for Left Atrial Appendage **Occlusion:** An Updated Systematic Review and Meta-Analysis

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BACKGROUND

Use of Intracardiac Echocardiography (ICE) to guide implantation of Left Atrial Appendage Occlusion (LAAO) devices is a novel and emerging approach. Data comparing ICE vs Transesophageal Echocardiography (TEE) as an intra-procedural imaging modality in this setting is lacking. We hypothesized that use of ICE would be associated with similar or improved clinical outcomes compared to TEE during LAAO.











Left Atrial Appendage **Occlusion with** Intracardiac Echocardiography is associated with Higher Odds of latrogenic Atrial **Septal Defect but Lower** Mean Number of Device Attempts.



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RESULTS

Left Atrial Appendage Occlusion with Intracardiac Echocardiography is associated with:

Mean Device Attempts (SMD -0.24 [95% CI -0.43, -0.04]; p=0.02)

Iatrogenic Atrial Septal Defect (OR 1.92 [95% CI 1.37, 2.7] p=0.0002)



Major Vascular Complications

(OR 1.16 [95% CI 0.51, 2.64]; p=0.72)

Major Bleeding

(OR 0.6 [95% CI 0.34, 1.06]; p=0.08)

Peri-Device Leak

(OR 0.96 [95% CI 0.72, 1.3]; p=0.81)

DISCLOSURE INFORMATION

The authors have no conflicts of interests or industry relationships to





