Preprocedural and procedural transesophageal echocardiography in patients with left atrial appendage occluder implantation

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Percutaneous left atrial appendage closure for stroke prevention in patients with atrial fibrillation has distinctively advanced in recent years¹. The current recommendations by the European Society of Cardiology include patients with high stroke risk and contraindications to long-term oral anticoagulation². Preprocedural transesophageal echocardiography remains the reference technique to exclude the presence of left atrial appendage thrombi prior to left atrial appendage closure and to assess left atrial appendage anatomy and accurate measurements regarding challenging anatomies and device sizing³. Procedural transesophageal guidance is generally recommended with any current CE mark device in addition to fluoroscopy. Transseptal puncture is well positioned with transesophageal bicaval and short axis views. Device sizing depends on the widest landing zone on fluoroscopy or transesophageal echocardiography which is by standard recommendation upsized by 2-5 mm. Device is adequately positioned at landing zone and deployment is controlled by transesophageal echocardiography and fluoroscopy. Prior to device release, evaluation of proper deployment is done by transesophageal echocardiography. Finally, after deployment additional assessment of possible residual flow is performed. Procedural transesophageal guidance is widely available imaging method which is contributing to procedural success and safety. We would like with our patients series to depict key procedural steps.

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LITERATURE

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