

Site-Specific Transseptal Puncture for Emerging Structural Heart Interventions

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HIGHLIGHTS

- ▶ This article reviews the importance of precision in transseptal puncture to optimize left-sided structural heart procedures such as mitral valve (MV) repair, left atrial appendage (LAA) occlusion and mitral paravalvular leak closure. In addition, the article discusses the importance of guidance by various views on TEE and ICE and how these imaging modalities help guide site-specific transseptal puncture for structural heart interventions.
- ▶ A slightly superior – posterior transseptal puncture (Figure 1) optimizes the MitraClip™ procedure to achieve the adequate 3.5 – 4 cm height above the MV annulus.
- ▶ A posterior and mid to slightly inferior transseptal puncture (Figure 1) optimizes the LAA procedure to enhance the coaxial sheath orientation towards the LAA.
- ▶ Repeat transseptal punctures can result in a thick and fibrotic septum, making subsequent transseptal punctures challenging. The NRG® Transseptal Needle provides added value to these cases by providing targeted RF delivery for safe passage into the left atrium without needing the force required with mechanical needles.
- ▶ Precision in transseptal puncture is critical for success in many structural heart procedures.

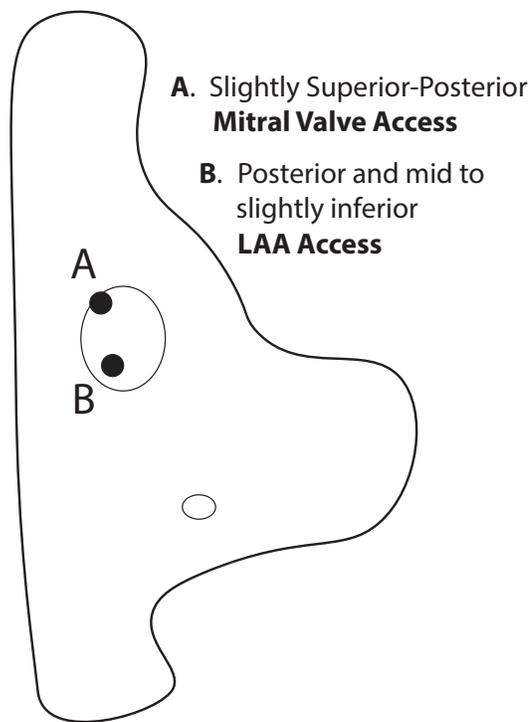


Figure 1. Approximate transseptal puncture locations on the Fossa Ovalis for structural heart procedures (RAO view)