The use of a radio frequency needle improves the safety and efficacy of transseptal puncture for atrial fibrillation ablation

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HIGHLIGHTS

- This study compared the outcomes of 975 transseptal punctures done with a standard mechanical needle to the outcomes of 575 transseptal punctures done with a radiofrequency (RF) needle.

- The RF needle was 7.2 times more likely to cross challenging septum compared to the mechanical needle.

- There were fewer incidents of pericardial tamponade with the RF needle (0%) compared to the mechanical needle (0.92%).

- The instrumentation time for the procedure was shorter for the RF needle (27.1 minutes) compared to the mechanical needle (36.4 minutes).

- The study concludes that the RF needle is superior to the mechanical needle for doing transseptal punctures.