

## **Clinical Experience with Routine Use of SafeSept™ J-Shaped Guidewire for Transseptal Puncture**

*Laish-Farkash, Avishag; Katz, Amos; Fishman, Evgeny; Yosefy, Chaim; Cohen, Sharon; Tcherniavsky, Irina; Khalameizer, Vladimir*

*Barzilai Medical Center, Ashkelon, Israel, Cardiology Department, Electrophysiology Unit, Faculty of Health Sciences, Ben Gurion University, Ashkelon, Israel*

Background: Transseptal puncture (TSP) is used for LA access to perform complex mapping and ablation procedures of the left cardiac chambers. Serious complications of up to 6% can arise from TSP, including up to 1.2% pericardial tamponade and 1.3% failure to cross the atrial septum. The SafeSept Transseptal Guidewire is a flexible nitinol J-curve needle that fits through the hub of the transseptal needle and involves the confirmation of left atrial positioning as well as left atrial wall protection. It was proved to be helpful and safe in the presence of thick, aneurysmatic or elastic fossa ovalis.

Aim: To evaluate whether routine use of SafeSept Guidewire improves safety and efficacy of TSP, without the need for intra-procedural echocardiography.

Methods: SafeSept Guidewire was incorporated into the routine TSP maneuver in Barzilai MC since it was introduced to the Israeli market in 2010. Our experience with the safety and efficacy of this guidewire is revised versus historical controls.

Results: 34 patients underwent TSP with SafeSept Guidewire between 2010-2011, predominantly for AF ablation (n=16) but also for left-sided accessory pathways (8), LA tachycardias (5), Watchman device (4) and ventricular tachycardia (1). 15% of the patients had a previous history of TSP. Successful, uncomplicated LA access was achieved in 100% of patients with no complications attributable to the SafeSept Guidewire. There was no difference seen between patients undergoing their first TSP or a repeat one. There was no need for TEE / intracardiac echo-guided TSP when using the SafeSept Guidewire, reducing the overall procedure cost in about 3000\$.

Conclusion: Our experience suggests that routine use of SafeSept Guidewire for TSP is safe, efficient and cost effective.