



Improved left atrial catheterization efficiency and consistency using a novel steerable transseptal puncture sheath

HIGHLIGHTS

- Using the **VersaCross™** Steerable Access Solution (steerable sheath + RF wire) for both transseptal puncture (TSP) and radiofrequency (RF) ablation procedures in atrial fibrillation patients is safe and efficient.
- Compared to the standard workflow (fixed curve sheath + RF needle, then exchange to a steerable sheath), the zeroexchange VersaCross Steerable workflow resulted in:
 - 34% faster time to TSP from venous access.
 - 40% faster left atrial (LA) catheterization.
 - 14.2 minutes (min) faster overall procedure time.

INTRODUCTION

- Steerable sheaths offer optimal contact force during RF catheter ablation, yet their usage for TSP has not been evaluated in terms of safety and workflow efficiency.
- This study compared LA catheterization and ablation time of a RF wire-based steerable transseptal system to the standard needle-based workflow.

METHODS

- Single-center, retrospective study of 30 consecutive patients with atrial fibrillation (AF) undergoing low fluoro/fluoroless RF ablation.
- Standard workflow (n=15):
 - TSP performed using an 8.5F **TorFlex™** Fixed Sheath (Boston Scientific) and NRG™ RF Needle (Boston Scientific).
 - **ProTrack™** Pigtail Wire (Boston Scientific) used to exchange the transseptal assembly for the Agilis™ Steerable Sheath (Abbott).

VersaCross Steerable workflow (n=15):

- VersaCross Steerable Access Solution, comprised of a pigtail RF wire and steerable sheath, was used to perform TSP and ablation with no sheath exchanges.
- TSP and catheter manipulations were guided by intracardiac echocardiography (ICE) and electroanatomic mapping (EAM) using the CARTO 3 System (Biosense Webster).
- **Primary endpoint:** Time to TSP and steerable sheath access into the LA.
- Secondary endpoint: RF ablation time, LA dwell time, acute procedural success, procedure time, procedural complications, and fluoroscopy use.

RESULTS

LA Access

- 34% faster time to TSP from venous access with VersaCross Steerable workflow vs. standard workflow (Figure 1A).
 - Less variability between cases in the VersaCross group.
- 40% faster steerable sheath placement in the LA with VersaCross Steerable workflow vs. standard workflow (Figure 1B).

RF Ablation

- Acute procedural success was achieved in all patients with no complications and comparable LA dwell time.
- Overall procedure time was shorter in the VersaCross Steerable workflow vs. standard workflow (Figure 1C).
- No difference in fluoroscopy use between groups.

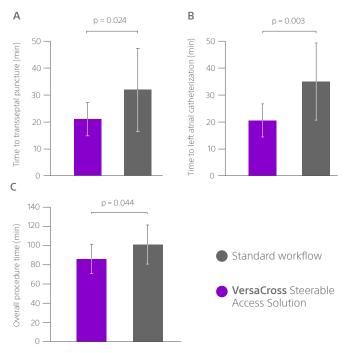


Figure 1. Improved workflow efficiency using VersaCross Steerable workflow vs. standard workflow.

DISCUSSION AND CONCLUSIONS

- The VersaCross Steerable Access Solution streamlined the ablation workflow by eliminating 4 procedural steps leading to a faster overall ablation procedure.
- The atraumatic pigtail wire and rounded dilator tip support direct puncture with a steerable sheath without compromising safety compared to standard steerable sheaths and needles.

NRG™ Transseptal Needle

NRG** Transseptal Needle

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TorFlex™ Transseptal Guiding Sheath

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ProTrack[™] Pigtail Wire

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VersaCross™ Steerable Sheath

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 Pulmonary edema
 Córonary artery spasm and/or damage
 Vessel trauma
 Pacemaker/defibrillator lead displacement

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VersaCross[™] RF Wire

VersaCross ** RF Wire

Autifolit* Federal law USA) restricts this device to sale by or on the order of a physician. Rx only. Prior to use, please see the complete "Instructions for Use" for more information on Indications, Contraindications, Warnings, Preacutions, Adverserberts, and Operations. IMDICATIONS: The VersaCross ** RF Wire is not recommended for use with any conditions that do not require the creation of an artial septal defect. The Connector Cable is not recommended for use with any one of the package is damaged. ** Laboratory staff and patients can undergo significant variety exposured on result in acute radiation in a cute readiation of other appropriate education before a tempting new interventional procedures. ** The VersaCross RF Wire and Connector Cable are supplied STERILE using an ethylene oude process. Do not use if the package is damaged. ** Laboratory staff and patients can undergo significant variety exposure can result in acute radiation injury as well as increased iris for somatic and genetic effects. Therefore, adequate measures must be taken to minimize this exposure. ** The VersaCross RF Wire and Connector Cable are intended for single patient use only. Do not attempt to sterilize and reuse either devices. Reuse can cause patient injury and/or the communication of infectious in the RFF-100A Baylic RF Generator and the included VersaCross RF Wire and Connector Cable provided. Attempts to use it with other connector cables can result in electrocution of the patient and/or operator. ** The VersaCross RF Wire and Connector Cable provided Attempts to use it with other connector cables can result in electrocution of the patient and/or operator. ** The VersaCross RF Wire in acute and the included VersaCross RF Wire and Connector Cable provided and any cause patient injury. ** The VersaCross RF Wire insol to use in the RFF-100A Baylic RF Generator and the included VersaCross RF Wire and Connector Cable provided for transseptal pluncture use through VersaCross RF Wire and the connector Cable Additional Surgical Procedure
 Wire entrapment/ entanglement
 Foreign body/wire fracture

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