Cardiac Electrophysiology Laboratory
St. David's Medical Center

Electrophysiology Study Report

Patient Information

Patient Name	VAN SLOOTEN, TRAVIS	**Age**	50 Years
Study Date	1/19/2023	**Gender**	Male
MRN	[redacted]	**Race**	Caucasian
Study Type	2_380707	**Height**	180 cm (5'11")
Account Number	[redacted]	**Weight**	95 kg (209 lbs)
Date of Birth	[redacted]		

Staff

Electrophysiologist	Andrea Natale, MD
Monitor	James Barron, RN
Circulator	Lorena Allen, RN
Scrub	Reggie Chambers, RCIS

Procedures

93619 Complete EP eval w/attempted arrythm induct
+93662 Intracardiac echocardiography
Left ventricular visualization
+93623 Programmed stimulation with RX infusion
RF ablation for PSVT (AF)
Serial ACTs to achieve ACT 350-500 seconds
+93613 Three-dimensional mapping
+93462 Transseptal access x2
+93621 Left Atrial / Coro Sinus pace/record
+93622 Left ventricular recording

Pre-Procedure Diagnoses

Persistent atrial fibrillation

Patient History

Persistent atrial fibrillation status post PVAI with Dr. Natale on 3/5/2015. The patient had a recurrence of an atrial arrhythmia in November 2022 for which he was cardioverted. Other history includes atrial flutter. LVEF is 61% from echo on 11/22/22.

ASA Score
ASA Classification III provided by anesthesia service.

Anesthesia Type
General

Patient Allergies
No known drug allergies

Pre Procedure Description

The patient was brought to the Electrophysiology lab in the fasting, post absorptive state. Risks, benefits and alternatives of the procedure and general anesthesia were explained to the patient and a written informed consent was obtained. The patient was prepped and draped in the usual sterile fashion. Vascular access was obtained by

the modified Seldinger technique and ultrasound guidance in both right and left groins and the right neck. The distal portion of the duodecapolar catheter was advanced into the coronary sinus and the proximal portion was placed along the crista terminalis. Surface ECG leads I aVF and V1, and intracardiac electrograms from the CS, HIS bundle and RVA were displayed in real time and recorded. Intracardiac echocardiography, transseptal puncture, endocardial mapping and radiofrequency ablation was performed as described below.

Heparin boluses (initially, 15,000 units) were given to maintain an ACT 350- 500 sec. An esophageal temperature probe was inserted and maneuvered under fluoroscopy to monitor esophageal temperatures throughout the case.

Vascular Access Sheaths

Sheaths	Site of Insertion
8F-8.5F MERIT 50	RIGHT FEMORAL VEIN
8F-8.5F MERIT 90	RIGHT FEMORAL VEIN
7F	RIGHT INTERNAL JUGULAR
11F	LEFT FEMORAL VEIN

Catheters

Manufacturer	Size	Type	Placement
BIOSENSE WEBSTER	7F	DUO DECAPOLAR	CORONARY SINUS /CRISTA
BIOSENSE WEBSTER	7F	LASSO 10/20 NAV	MAPPING
BIOSENSE WEBSTER	8F	SMARTTOUCH SF J-CURVE	MAPPING/ABLATION
BIOSENSE WEBSTER	10F	ULTRASOUND	RIGHT VENTRICLE /RIGHT ATRIUM

ICE and Three-Dimensional Mapping

A three-dimensional reconstruction of the left atrium was created with the use of the Carto 3 system. The following structures were visualized with ICE: the right atrium, fossa ovale, tricuspid valve, coronary sinus, crista terminalis, RA appendage, LA, mitral valve, left atrial appendage, left superior pulmonary vein, left inferior pulmonary vein, right superior pulmonary vein, right inferior pulmonary vein, aortic valve, left ventricular outflow tract, ascending aorta, pulmonic valve, right ventricular outflow tract and pulmonary artery. ICE was also used to guide transseptal catheterization.

Transseptal

Left atrial instrumentation was achieved by double transseptal punctures. The Baylis transseptal system was used to facilitate the transseptal punctures. Proper placement was confirmed by fluoroscopy, intracardiac echocardiography, contrast injection, left atrial pressure tracings and left atrial pressure.

LA mean pressure 14/3/8 (mmHg)

Post Procedure Description

The patient arrived to the Electrophysiology laboratory in sinus rhythm. After left atrial instrumentation was achieved by double transseptal puncture, the circular mapping catheter was placed in all four pulmonary veins, antrums and along the posterior wall of the left atrium. During mapping, it was noted the pulmonary veins and the posterior wall remained electrically silent from the previous ablation. Atrial scarring was observed. Electrograms were mapped to the floor of the left atrium, left atrial lateral wall and anterior wall of the left atrium. Radiofrequency energy was applied with elimination of these potentials. The left atrial appendage was ablated and isolated. The coronary sinus was ablated and isolated. Temperature in the esophagus was monitored via an esophageal temperature probe throughout the case to avoid over-heating. Radiofrequency power was titrated if overheating was observed by intracardiac echocardiography and/or elevation of esophageal temperature.

The circular mapping catheter was then placed in the superior vena cava and the superior vena cava was isolated using radiofrequency energy. No phrenic nerve stimulation was present at 20 mA at sites of radiofrequency ablation in the superior vena cava.

A total of 61 minutes of radiofrequency energy lesions were delivered.

At the end of the procedure, protamine was given for Heparin reversal and sheaths and catheters were removed. Appropriate sheath positioning for the venous closure devices were confirmed with ultrasound. Vascular closure devices (Vascades Lot #G580I220531A) were deployed to each vascular puncture site achieving hemostasis. Hemostasis was achieved with direct manual pressure at the right internal jugular site. The patient tolerated the procedure well and was transferred in stable condition.

Plan

1. Continue long-term anti-coagulation.
2. Continue home medications as directed.
3. Follow-up in 6-12 weeks.
4. Event recorder upon discharge.

Conclusion

1. The patient arrived to the Electrophysiology laboratory in sinus rhythm.
2. Atrial scarring was observed from the previous ablation.
3. The pulmonary veins and the posterior wall remained electrically silent from the previous ablation.
4. Successful ablation of electrograms along the floor of the left atrium, left atrial lateral wall and anterior wall of the left atrium.
5. Successful ablation and isolation of the coronary sinus.
6. Successful ablation and isolation of the left atrial appendage.
7. Successful isolation of the superior vena cava.
8. A total of 61 minutes of radiofrequency energy lesions were delivered.

Radiation dosage

Air Kerma(AK): 243 mGy
Dose Area Product (DAP): 1886.17 uGy*m^2
Fluoro time: 59.7 minutes

Complications

None

Number of ACTs performed

Three

Total contrast used

None

Estimated Blood Loss

Less than 20 ml

Specimens Collected

None

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Post Procedure Diagnosis
Persistent atrial fibrillation status post radiofrequency ablation.

Andrea Natale, M.D. January 19, 2023

Parts of this document were entered by the electrophysiology monitoring staff member under the direction of the physician.

J. Clay Barron, RN January 19, 2023