PERICARDIAL ACCESS WITH MICROPUNCTURE NEEDLE FOR LARIAT: IS IT SAFE AND EFFECTIVE?

Poster Contributions
Poster Hall B1
Sunday, March 15, 2015, 3:45 p.m.-4:30 p.m.

Session Title: Novel Findings in the World of Electrophysiology
Presentation Number: 1220-257

Authors: Alexandra Regina Martin, Eric Crimmons, Steven Martin, Harpaul Bajwa, Denes Korpas, Shari Rooney, Hosakote Nagaraj, Nebraska Heart Hospital, Lincoln, NE, USA

Background: Pericardial access is commonly used for Ventricular Tachycardia ablation. Left atrial appendage (LAA) exclusion using the LARIAT device also requires pericardial access. There is no standardized techniques for pericardial access.

Objectives: To ascertain the success and safety of pericardial access using the 21Ga X 12cm micro-puncture access needle

Methods and Results: LARIAT procedure was attempted in 58 patients under general anesthesia at Nebraska Heart Institute between February 2013 and Aug 2014 who had contraindications for anticoagulation. Pericardial access was obtained in all the 58 patients using 21Ga X 12cm micro-puncture access needle (Galt). LARIAT was successfully performed in 55/58 patients for a 94% success rate. One patient had RV laceration by the device delivery sheath that required surgical repair. Other two patients had pericardial adhesions and the procedure was aborted. Initial pericardial access was successfully obtained in all the 58 patients.

Discussion: Literature suggests that use of 18 gauge Pajunk needle for pericardial access had high rates of complications from RV lacerations leading to surgical repair(1)

Conclusion: Pericardial access using micro-puncture access needle is a safe and effective method with low complication rates based on our experience at Nebraska Heart Institute. The procedural complication rate is superior to the use of 18 gauge Pajunk needle as reported by other similar centers (1).