EFFECT OF ENDOEPICARDIAL PERCUTANEOUS LEFT ATRIAL APPENDAGE LIGATION (LARIAT) ON ARRHYTHMIA BURDEN IN PATIENTS WITH ATRIAL FIBRILLATION

Poster Contributions
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Authors: Dhanunjaya R. Lakkireddy, Matthew Earnest, Pramod Janga, Madhu Reddy, Ajay Vallakati, Jayant Nath, Ryan Ferrell, Steven Freeman, Nitish Badhwar, Randall Lee, Luigi Di Biase, Andrea Natale, Vijay Swarup, University of Kansas Medical Center, Kansas City, KS, USA

Background: Left atrial appendage is a very common non Pulmonary venous source of triggered activity. Electrical isolation of LAA seems to be effective in improving outcomes of RF ablation. It is not clear how ligation of the LAA impacts arrhythmia burden in patients with AF

Methods: We prospectively followed AF patients who underwent LAA ligation using a novel percutaneous ligation system (LARIAT, SenterHeart, Redwood, CA) with implantable cardiac devices at the participating institutions. We compared the AF burden over a period of 3 months preceding and following the LAA ligation. Indications included high bleeding risk (45%), failed anticoagulation (39%) and concomitant ablation strategy (31%).

Results: A total of 18 successive patients with a cardiac device (Pacemaker-11, ICD-4 & CRTD3). The average age was 56 yrs with 72% males. Mean CHADS2 score was 3 and a HASBLED score was 4. Paroxysmal AF was seen in 50% and the other 50% had non-paroxysmal AF. The mean EF was 45% with a LA size of 5 cm. Three months post ligation the Atrial arrhythmia burden decreased from 81% to 47% (p<0.01). In 11% patients, AF burden went from 100% to 0%. 89% of patients had complete elimination of LAA communication, 6% had <1 mm 6% had 5 mm central recanalization. Patients who had recanalization did not show reduction in arrhythmia burden.

Conclusion: Complete ligation and elimination of LAA from the cardiac circulation seems to have a positive benefit in atrial arrhythmia burden reduction in patients with AF.