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## ELECTRICAL REMODELING AND CLINICAL OUTCOMES AFTER LEFT ATRIAL APPENDAGE LIGATION AND CATHETER ABLATION IN PATIENTS WITH PERSISTENT ATRIAL FIBRILLATION

Moderated Poster Contributions Arrhythmias and Clinical EP Moderated Poster Theater, Poster Hall B1 Saturday, March 14, 2015, 10:15 a.m.-10:25 a.m.

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Authors: <u>Nitish Badhwar</u>, Dhanunjaya Lakkireddy, Mitsuharu Kawamura, Sivaraman Iyer, Randall Lee, University of California, San Francisco, San Fancisco, CA, USA

**Background:** Left atrial appendage (LAA) ligation results in LAA electrical isolation and a decrease in atrial fibrillation (AF) burden. This study assessed the safety, clinical outcomes and electrical remodeling after percutaneous LAA ligation and pulmonary vein isolation (PVI) in patients with persistent AF.

**Methods:** 22 patients with persistent AF underwent attempted LAA ligation with the LARIAT suture delivery device followed by PVI. TEE was used to confirm LAA closure acutely and 4-6 weeks after ligation during the PVI. PVI was confirmed with the demonstration of both entrance and exit block from the pulmonary veins. All patients (n=10) in sinus rhythm pre- and post-LAA ligation underwent P-wave analysis.

**Results:** LAA ligation with the LARIAT device was successful in 21 of 22 (95%) patients. PVI was subsequently performed in 20 of 21 patients. At 3 months, 13 of 19 (68.4%) patients were in sinus rhythm. 4 patients underwent a second PVI. At 6 months, 15 of 20 (75%) patients were in sinus rhythm. There was a significant decrease in P-wave duration and P-wave dispersion after LAA ligation. There were no procedural complications during either LAA ligation or PVI.

**Conclusion:** Staged LAA ligation and PVI is feasible, safe and decreases P-wave dispersion. Further studies are needed to assess the efficacy of LAA ligation as adjunctive therapy to PVI for maintaining sinus rhythm in patients with persistent AF.

