



4046-12. HYBRID PERCUTANEOUS ENDOCARDIAL AND THORACOSCOPIC EPICARDIAL RADIOFREQUENCY ABLATION OF LONG STANDING PERSISTENT ATRIAL FIBRILLATION: INITIAL EXPERIENCE

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Resumen

Background and objectives: To overcome the shortcomings of percutaneous catheter ablation and of minimal invasive surgical ablation, the hybrid ablation procedure has recently been introduced in order to combine the advantages of both techniques in the treatment of long standing persistent atrial fibrillation (AF). Our objective was to evaluate feasibility, safety and efficacy of this technique in our first cases.

Methods: Between May 2010 and December 2011, 5 male patients with long standing persistent AF, mean age 50.8 years (range 42-62 years), underwent a single step hybrid minimally invasive surgical treatment of persistent AF combined with a percutaneous endocardial ablation. Both techniques employed radiofrequency energy during general anesthesia in the EP lab. Preoperative patient characteristics are depicted in table 1. The surgical procedure is a closed-chest video assisted right monolateral thoracoscopic epicardial ablation encircling all pulmonary veins in a box lesion. Two ablation sequences were carried out at target temperatures of 65 and 75 °C, 120 sec per each ablation; the power is adjusted according to the target temperature (max 150W). In addition, percutaneous catheter assessment of pulmonary vein isolation and additional lesions if necessary were performed. Rhythm follow-up using 7-day ECG recording was performed at 3,6 and 12 months.

Results: There were no intraprocedural complications. All patients were extubated in the EP lab. Median procedure time was 240 min (range 120-395 min). Median total X-Ray time was 19.4 (range 11.4-59.6 min). No patient required intensive care or blood transfusion. One patient presented a transient diaphragmatic paresis and one patient suffered a post-interventional transient bradycardia. Mean in-hospital length of stay was 6 days. Results of AF assessment are depicted in table 2.

Conclusions: The single step hybrid surgical-epicardial and percutaneous-endocardial ablation treatment of long persistent AF is feasible and seems to be safe in an initial small series. Optimal interdisciplinary collaboration between electrophysiologists, cardiac surgeons and anesthesiologists is crucial. The efficacy of this treatment must be further studied in larger series and longer follow up.



