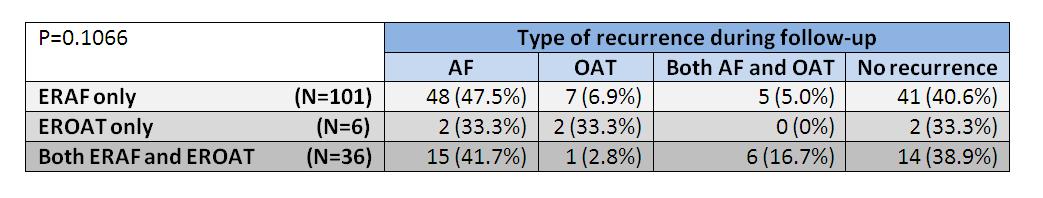
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**Early Recurrent Atrial Arrhythmia after Pulmonary Vein Antral Isolation: Type of Early Recurrence does not Predict Rate or Nature of Long-Term Arrhythmia Recurrence**   
  
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*Abstract:*  
**Introduction:**  
Early recurrences of atrial arrhythmias (ERAA) after pulmonary vein antral isolation (PVAI) for atrial fibrillation (AF) are common and predict long-term AF recurrence. Whether the type of ERAA (atrial fibrillation [ERAF] or organized atrial tachycardia/flutter [EROAT]) predicts long-term arrhythmia recurrence is unknown.  
  
**Methods:**  
We studied 300 patients (pts) with AF (100 paroxysmal, 100 persistent, 100 longstanding persistent) who underwent first-time PVAI and elimination of non-PV triggers from 2006-2011. All pts with typical atrial flutter also underwent cavotricuspid isthmus ablation either before or during PVAI. All pts received 30-day transtelephonic monitors (TTM; n=3) and clinic visits at 6 wks, 6 mos and 1 yr. All ERAA episodes recorded on TTM in the first four wks after PVI were categorized as being either ERAF or EROAT. Ablation failure was defined as ≥1 confirmed, sustained (>30s) AF/OAT recurrence up to 1 yr after single ablation.  
  
**Results:**  
The cohort was 76% male with mean age 59.1±9.8y; LVEF 54.7±10.2%, LAd 4.6±0.7cm. One hundred and forty three pts (47.7%) experienced ERAA (101 [70.6%] ERAF alone, 6 [4.2%] EROAT alone, and 36 [25.2%] with both ERAF and EROAT). Over 1 yr, 86 pts (60.1%) experienced AF/OAT recurrence. The type of ERAA did not predict nature of long-term arrhythmia recurrence (p=0.1066). Long-term arrhythmia freedom was similar regardless of ERAA type (ERAF only: 38.7%, EROAT only: 33.3%, ERAF+EROAT: 41.7%; p=0.6477).  
  
**Conclusions:**  
ERAA after PVAI is common and may predict long-term ablation failure. However, type of ERAA (ERAF versus EROAT) does not appear to predict the rate or nature of long-term arrhythmia recurrence.  
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