Transtelephonic ECG-monitoring to determine correlation between symptoms and rhythm after Atrial Fibrillation Ablation, early results.

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Background
• In clinical practice follow-up (F/U) after ablation of Atrial Fibrillation (AF) is based on data from patient questionnaires, 12-lead ECG/24-h Holter monitoring. The purpose of our investigation was to determine the correlation between symptoms and rhythm following AF-ablation using extended transtelephonic ECG-monitoring, Thumb-ECG (Zenicor®).

Methods
• Beginning from January 2009 all patients (pts) scheduled for de novo AF-ablation was studied. F/U was scheduled 4 and 12 months after the ablation procedure, with pts instructed to record during 1 week, twice daily and furthermore during symptoms suggestive of AF. On each recording the patient noted in a diary if symptoms or not were at hand. Recordings and diaries were analyzed for: Atrial fibrillation (AF), Atrial tachycardia (AT), Sinus rhythm (SR) or noise and concomitant symptoms.

Results
• When analysed, 56 consecutive pts (39 M, 60±8yrs; 11% SHD) had completed the 4 month F/U. Encircling of the pulmonary veins (PV) with PV isolation confirmed by Lasso catheter were achieved in 95% of the pts, requiring a mean of 45±14 min of RF delivery. 812 ECG’s were recorded and analyzed, rhythm and symptoms could be determined in 634 (78%; 554 SR / 55 AF/ 25 AT), while 57 missed data on symptoms (7%) and 121 (15%) showed noise. When analyzing pts we found that 40 (71 %) pts showed SR in all recordings, however 11/ 40 (27%) reported palpitations despite SR. 14 (25 %) and 2 (4%) pts showed AF or AT respectively, in at least one recording. 5/14 (35%) with confirmed AF reported lack of symptoms, while both pts with AT had cardiac symptoms.

Conclusions
Thumb-ECG (Zenicor®) is helpful in the process of determining correlation between symptoms and rhythm following AF ablation. Importantly, lack of symptoms does not exclude occurrence of AF, whereas symptoms suggestive of AF relapse are more precisely assessed.