

Assert Sub Study - M. Brambatti

- The ASSERT trial demonstrated that detection of subclinical episodes of atrial fibrillation (SCAF) longer than 6 minutes in duration are associated with 2.5 fold increased risk of stroke in hypertensive device (pacemakers or defibrillator) recipients without previous history of atrial fibrillation.
- Since these modern devices can provide a detailed documentation of timing and duration of all SCAF episodes, the ASSERT substudy was designed to investigate the temporal relationship between SCAF and embolic events.
- The results demonstrated that among 51 ASSERT patients who experienced stroke, 26 (51%) patients has SCAF. In 18 patients (35%), SCAF was detected prior to the stroke or systemic embolism; however, in only 4 patients (8%) SCAF was detected within 30 days prior to such an event. Thus ,only 15% of patients with SCAF-associated embolic events had evidence of SCAF longer than 6 minutes within the month prior to their stroke or systemic embolism showing a lack of temporal relationship between SCAF and stroke. These data suggest that, at least in device patients with isolated SCAF detection, SCAF may simply be a risk marker for stroke. On the other hand, if the relationship between SCAF and embolism is casual, these findings demonstrate that how AF causes embolic events is far more complex than long-lasting AF episodes leading to atrial stasis, clot formation and consequently, embolism, as conventionally believed.