

A microscopic image of cardiac tissue, likely showing the intricate network of myocardial fibers and intercalated discs. The image is colorized, with some areas appearing in a vibrant red and others in a teal or blue hue, highlighting the complex structure of the heart muscle.

MANAGEMENT OF SUB-CLINICAL ATRIAL FIBRILLATION (SCAF)

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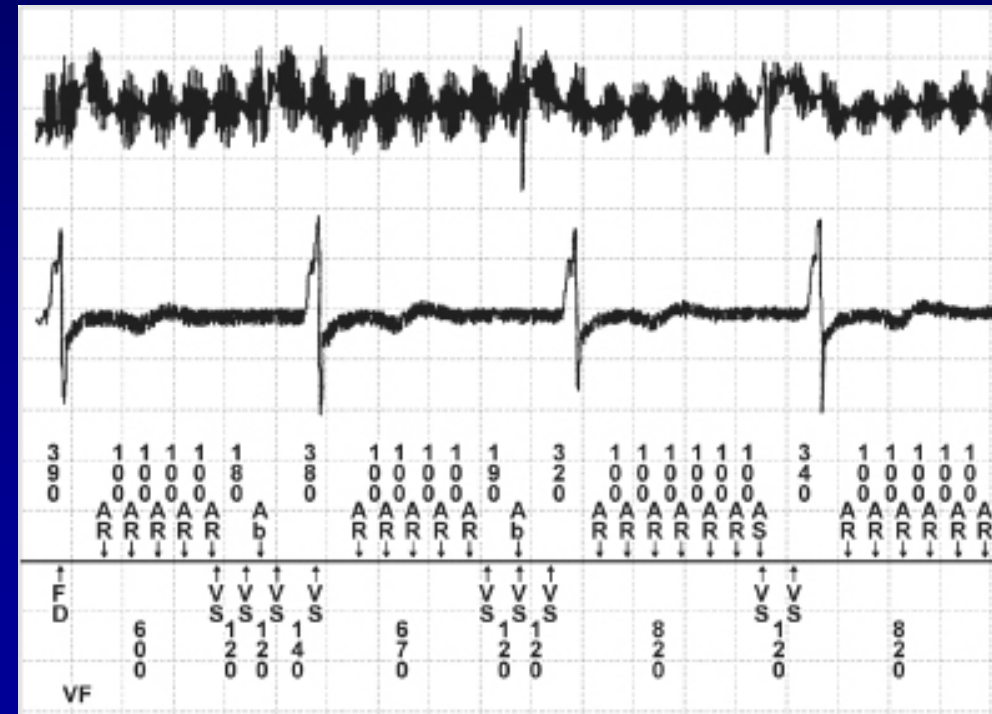
Management of Sub-Clinical Atrial Fibrillation - SCAF

Key Points

- atrial fib is very common and its prevalence is increasing markedly
- atrial fib prevalence increases with age and/or structural heart disease
- clinical atrial fib is the presumed cause of 20% of all strokes / STE
- OAC therapy decreases the risk of stroke / STE in pts with clinical atrial fib
- duration / burden of clinical atrial fib is related to risk of stroke / STE
- subclinical atrial fib (AHRE) can be identified by CIED with a reasonable PPV
- subclinical atrial fib is also very common (13% per year in ASSERT)
- subclinical atrial fib predicts clinical atrial fib (HR 5.6) and stroke (HR 2.5)
- stroke risk in subclinical atrial fib is half that of clinical atrial fib
- unknown if OAC has net clinical benefit in patients with subclinical atrial fib
- weak recommendation for OAC therapy in high-risk subclinical atrial fib
- randomize in ARTESiA or NOAH-AFNET 6

What is Sub-Clinical Atrial Fibrillation (SCAF)?

interrogation of CIED showing AHRE: asymptomatic, short duration (30 sec-24 hrs), infrequent, asymptomatic: (DDX artifact)



TRENDS Study (Its Not an Acronym)

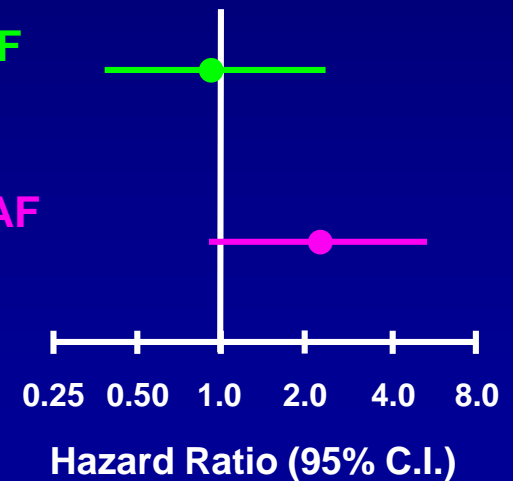
AT/AF burden defined as maximum daily AHRE duration in preceding 30 day rolling window; observed median AT/AF burden was 5.5 hours

analysis done by window not by patient
 47% of pts (24% of windows) had AT/AF
 44 stroke/TIA/STE (40 with prior window)

Stroke/TIA/STE

low vs no AT/AF
 0.98 (0.34-2.82)

high vs no AT/AF
 2.20 (0.96-5.05)



| | NO AT/AF | <5.5 hr AT/AF | >5.5 hr AT/AF |
|-----------------|---------------|---------------|---------------|
| TE / yr | 1.1 (0.8-1.8) | 1.1 (0.4-2.8) | 2.4 (1.2-4.9) |
| TE / yr not TIA | 0.5 (0.3-0.9) | 1.1 (0.4-2.8) | 1.8 (0.9-3.8) |

ASymptomatic Atrial Fibrillation and Stroke Evaluation in Pacemaker Patients and the Atrial Fibrillation Reduction Atrial Pacing Trial (ASSERT)

Primary Outcomes

incidence of SCAF in three months.....261 patients (10.1%)

median time to SCAF detection in three months.....35 days

incidence of clinical AF in three months.....7 patients (0.3%)

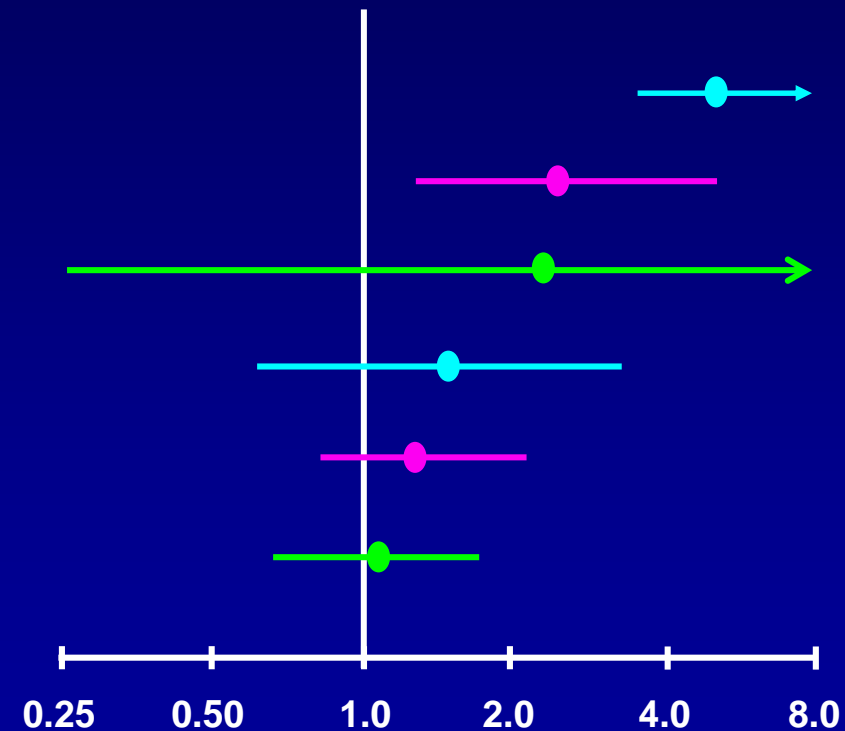
incidence of SCAF in 2.5 years.....894 patients (36.5%)

incidence of clinical AF in 2.5 years.....112 patients (4.6%)

ASymptomatic Atrial Fibrillation and Stroke Evaluation in Pacemaker Patients and the Atrial Fibrillation Reduction Atrial Pacing Trial (ASSERT)

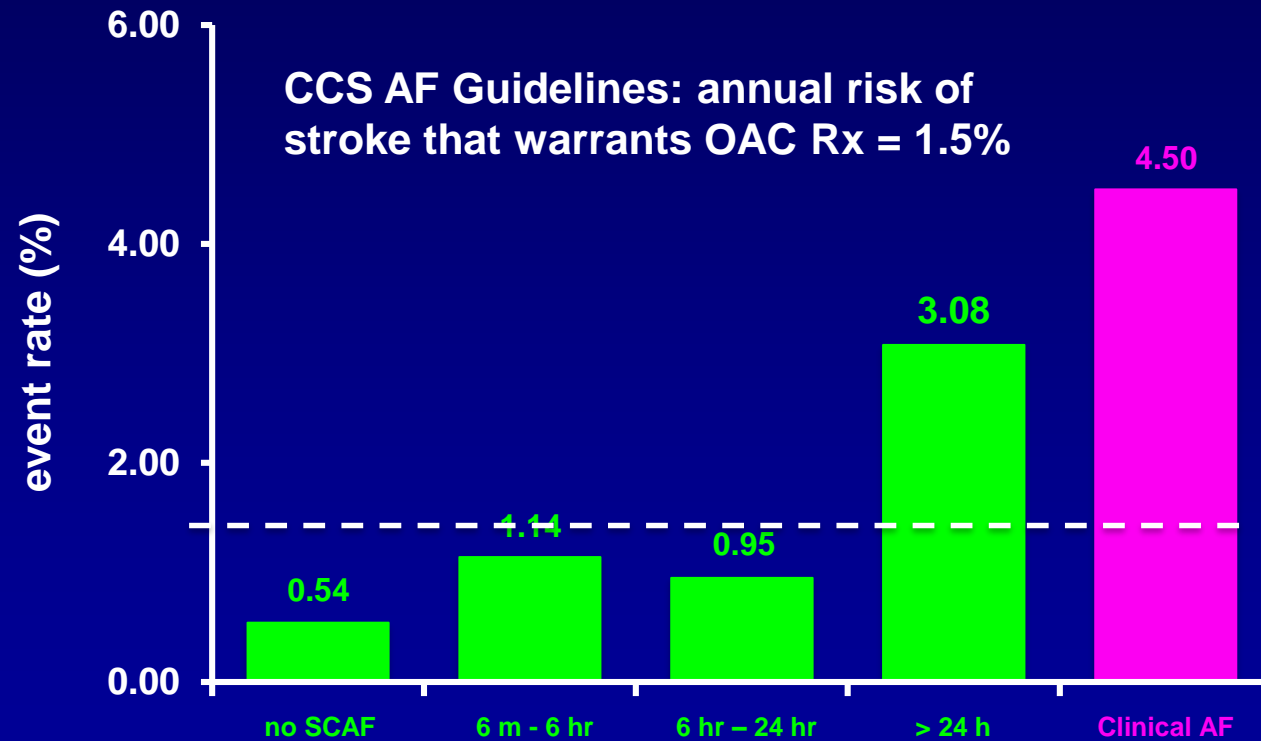
Outcomes By SCAF in First Three Months (HR: 95% CI)

| | |
|-----------------------|------------------|
| Clinical Atrial Fib | 5.56 (3.78-8.17) |
| Ischemic Stroke | 2.52 (1.25-5.08) |
| Systemic Embolism | 2.24 (0.25-20.1) |
| Myocardial Infarction | 1.52 (0.68-3.42) |
| CHF Hospitalization | 1.36 (0.85-2.19) |
| Vascular Death | 1.11 (0.69-1.79) |

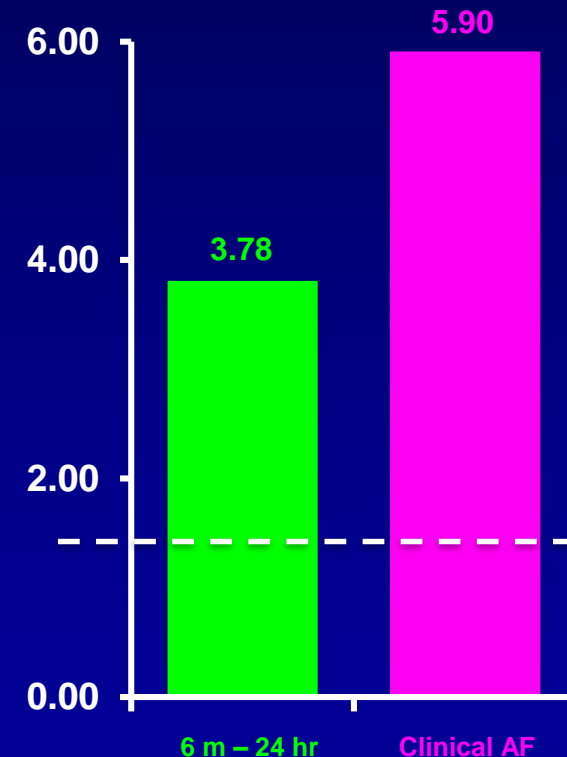


ASymptomatic Atrial Fibrillation and Stroke Evaluation in Pacemaker Patients and the Atrial Fibrillation Reduction Atrial Pacing Trial (ASSERT)

Annual Rate of Stroke/STE by SCAF Duration

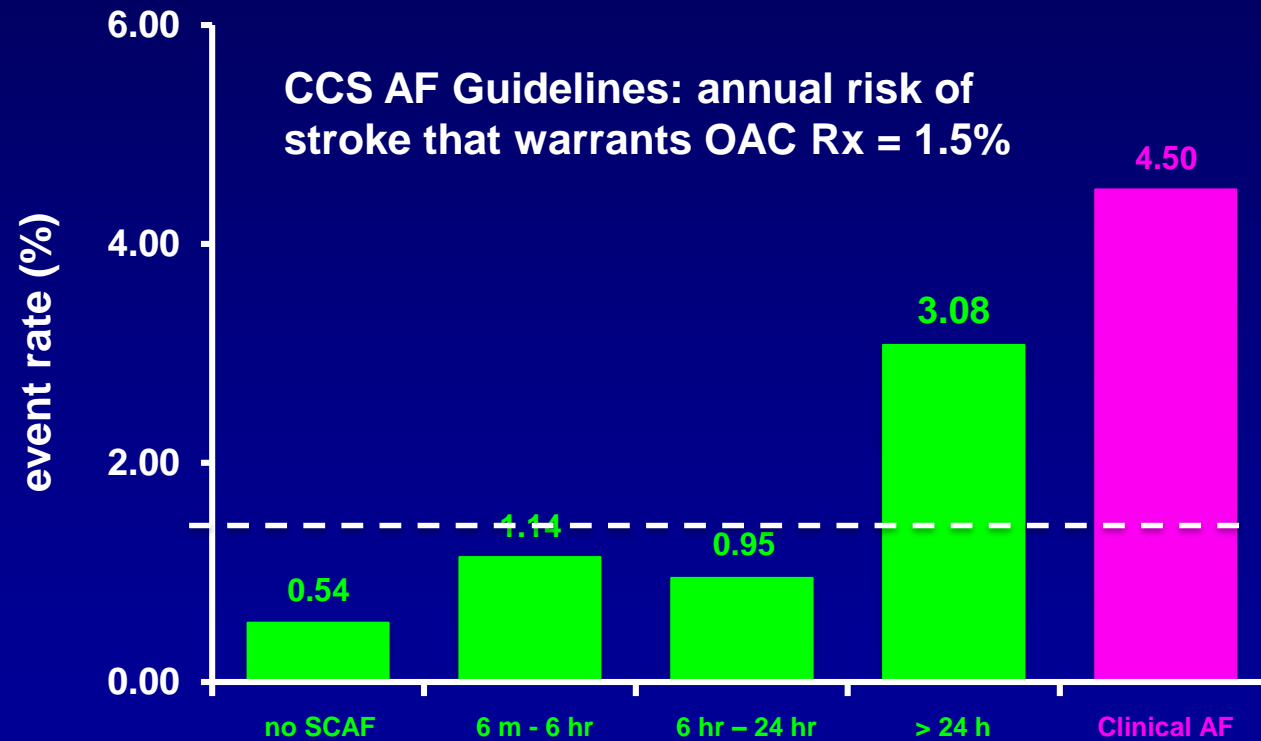


if CHADS₂ >2

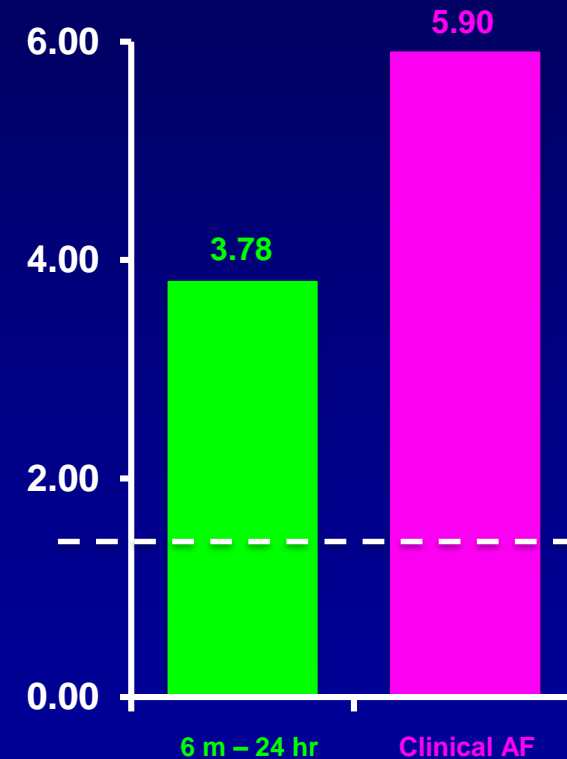


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Annual Rate of Stroke/STE by SCAF Duration



if CHADS₂ >2



Apixaban for the Reduction of Thrombo-Embolism in Patients with Device-Detected Sub-Clinical Atrial Fibrillation (ARTESiA)

planned 4000 pts without prior AF/AFL, with no OAC indication, with CIED reported AHRE, and with risk factors: prior STE, age ≥ 75 yrs, age 65-74 yrs with ≥ 2 more, or age 55-64 yrs with ≥ 3 more CHA₂DS₂-VASc risk factors

double-blind, double-dummy
AHRE 6 min- 24 hrs

R

1:1 to 2 parallel groups

apixaban 5 mg bid
(reduced dose 2.5 mg bid)

standard care plus
ASA 81 mg daily

primary outcomes: stroke or STE
secondary outcomes: major bleeding (ISTH), mortality, quality of life, cost