Top Ten Things To Know
Atrial Fibrillation

1. Atrial fibrillation (AF) represents one of the most potent risk factors for stroke.

2. An AF Summit was held in Washington D.C., June 12-13th 2010 and included patients, nurses, physicians, health policy makers and regulators as well as basic, translational, population, outcomes and clinical scientists. This paper contains an overview of the key concepts presented and the core recommendations from these proceedings in 4 areas:
   - Mechanisms of AF: Basic and Translational Science and Genetics
   - Epidemiology, Outcomes, Cost, AF and Stroke Prevention
   - Meeting the Clinical Challenge in AF
   - Redefining the Therapeutic Goals of AF

3. Mechanisms of AF: Basic and Translational Science and Genetics – promising areas of investigation include:
   - combinations of antiarrhythmic medications
   - mechanism and role of atrial fibrosis in AF
   - endothelin 1
   - methods to directly assess atrial myocardial collagen burden

4. Epidemiology, Outcomes, Cost, AF and Stroke Prevention
   - Because AF represents one of the most potent risk factors for stroke, preventing hypertension, obesity and diabetes should substantially decrease the incidence of ischemic neurological events.
   - AF is more common in whites than in other racial and ethnic groups.
   - Proper translation of imaging tests, biomarkers and genomic markers into clinical practice for improved risk prediction is uncertain.

5. Meeting the Clinical Challenge in AF
   - In addition to antiarrhythmics, new strategies under investigation include prevention targets and antifibrosis agents.
   - Additional needs include determining appropriate endpoints for studies and defining quality of life metrics specific to AF and its impact on symptoms and outcomes.

6. Redefining the Therapeutic Goals of AF – these include the need for further evaluation of:
   - the interactions between AF and heart failure (HF)
   - rhythm control, comparing antiarrhythmic drug therapy with catheter ablation
   - prevention of post-op AF
   - better decision support tools, and
   - studies to define the interaction between sleep apnea and AF
7. Relationship of AF and heart failure:
   - These are increasingly seen together as our population ages.
   - HF can increase the risk for AF.
   - AF can increase morbidity in HF patients.
   - The complex interactions of these two conditions need to be considered in future research.

8. Sleep apnea is commonly seen with AF.
   - Individuals with moderate-to-severe sleep apnea are approximately 4 times more likely to have AF than those without apnea.
   - The occurrence of apneas during sleep may serve as triggers to paroxysms of AF.
   - Sleep apnea prevalence appears to be increasing in conjunction with the obesity epidemic.

9. While considerable progress has been made in understanding the mechanism of AF and preventive and treatment strategies, much remains unknown.

10. Outcomes of patients with AF can be improved by prompt diagnosis, appropriate treatment, adherence to practice guidelines, quality research, and translating research findings into better decision making.

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