Atrial Fibrillation: Risk factor or risk marker for stroke – J. Healey

- The Problem
  - It is well-established that clinical atrial fibrillation (AF) is factor for stroke, and that the use of oral anticoagulation (OAC) in this setting prevents stroke.
  - Many technologies can now monitor patients continuously for extended periods of time and detect sub-clinical AF which is either asymptomatic, or too transient to be detected by standard ECG methods. The TRENDS and ASSERT studies in pacemaker patients now show that sub-clinical AF is associated with an increased risk of stroke; however, it is unclear if this form of AF is acting as a risk factor or simply a risk marker. The efficacy of OAC is also unknown in this setting.
- The Discussion
  - The relationship between sub-clinical AF and stroke is complicated and it is likely that it is not always the same. Data from ASSERT and TRENDS suggest that sub-clinical AF and stroke are not temporally associated in the majority of cases and in many cases, AF episodes are of very brief duration, suggesting that AF may behave as a risk marker in these cases. In a population-based study from Denmark, atrial tachycardias as brief as 20 beats were associated with an increased risk of stroke or death; again suggesting that this form of AF may act as a risk marker. However; data from TRENDS and ASSERT also suggest that as the burden of AF increases, so does the stroke risk, which suggest that longer episodes of AF may behave as a classical risk factor.
- Conclusion
  - At times, AF acts as a risk factor for stroke, while at other times like a risk marker. From a practical perspective, this is perhaps less important, as in either case it is important to treat the underlying conditions predisposing to AF and to consider the use of OAC to prevent stroke. Ongoing trials like ARTESiA will determine the role of OAC in the treatment of sub-clinical AF.
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