

Island Health Residency Program – Therapeutic Session: Atrial Fibrillation Wednesday, March 30, 2022

Learning Goals & Objectives of the Session

1. To review the pathology, potential complications, and management goals of AF
2. To use a case-based format to apply the principles of AF management and strategize a patient care plan.
3. Describe the relevant monitoring tests for AF drug therapy
4. To describe the role of procedural treatment options for atrial arrhythmias

Optional Pre-Readings from CCS AF Guidelines 2020**:

1. Classifications and Definitions: (p. 1850 – figures 2 and 3)
 - <https://dxlink.ca/CCS/LearningOnDemand2021/Tailored-Approach-to-AF/>
 - Dr. Jason Andrade: Should patients with secondary AF (sepsis, post-op, etc.) be anticoagulated?
2. Pathophysiology, Clinical evaluation (p. 1851 – 1858 – figure 4)
 - <https://dxlink.ca/CCS/LearningOnDemand2021/Tailored-Approach-to-AF/>
 - Dr. Jeff Healey: AF screening and device-detected AF: Where to start and what to do?
3. Management of modifiable risk factors (p. 1861 – 1863 – figure 6)
4. Stroke Prevention
 - Stroke risk assessment (p. 1866 – 1867 – figure 8)
 - i. Compare to CHA₂DS₂-VASc from ESC 2020 guidelines (p. 29 – 31 – table 8)
 - ii. The 2014 AF Guidelines Companion: A Practical Approach to the Use of the CCS Guidelines (p. 2 – 7 for defining scoring risk factors)
 - <https://dxlink.ca/CCS/LearningOnDemand2021/Tailored-Approach-to-AF/>
 - Dr. Kori Leblanc: Anticoagulation for special populations (renal failure, obesity, cancer, liver disease)
 - Anticoagulation in special circumstances – Cardioversion (p. 1882 – 1884)
 - i. Compare to ACC 2019 Focused update – section 6.1.1 (p. e136 – 137)
 - Management of a bleeding event (p. 1890 – 1891 – figure 14)
5. Arrhythmia Management: Rate and Rhythm Control (p. 1898 – 1909)
 - General overview of arrhythmia management – figure 16
 - Long-term rate control – figure 18
 - Long-term rhythm control – figure 19

***detailed reading not required, but please familiarize yourself with the resources available*

Optional Articles of interest:

1. EAST-AFNET4: Kirchhof P, et al. "Early rhythm-control therapy in patients with atrial fibrillation". *The New England Journal of Medicine*. 2020. 383(14):1305-1316
 2. RATE-AF: Kotecha D, et al. "Effect of Digoxin vs Bisoprolol for Heart Rate Control in Atrial Fibrillation on Patient-Reported Quality of Life." *JAMA*. 2020. 324(24): 2497-2508.
 3. Digoxin: The Good and the Bad. Ziff and Kotecha. *Trends in Cardiovascular Medicine*. 2016. 26:586-596.
 4. LEGACY TRIAL: Pathak R, et al. "Long-Term Effect of Goal-Directed Weight Management in an Atrial Fibrillation Cohort: A Long-Term Follow-Up Study." *JACC*. 2015. 65(20): 2159-2169
 5. Voskoboinik A, et al. "Alcohol Abstinence in Drinkers with Atrial Fibrillation. *NEJM*. 2020. 382: 20-28.
 6. Atrial fibrillation: Michaud and Stevenson. *NEJM* 2021: 384:353-361
- Please download the Calculate by QxMD app to use the "ECG: Corrected QT" for case example

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