What Cannot Be Missed: Important Publications on Electrophysiology in 2019

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Guidelines and Consensus Statements

1. Brugada J, Katritsis DG, Arbelo E, et al. 2019 ESC guidelines for the management of patients with supraventricular tachycardia. The Task Force for the management of patients with supraventricular tachycardia of the European Society of Cardiology (ESC). *Eur Heart J* 2020;41:655–720. https://doi.org/10.1093/eurheartj/ehz467; PMID: 31504425.
2. Cronin EM, Bogun FM, Maury P, et al. 2019 HRS/EHRA/APHRS/LAHRS expert consensus statement on catheter ablation of ventricular arrhythmias *Europace* 2019;21:1143–4. https://doi.org/10.1093/europace/euz132; PMID: 31075787.
3. Towbin JA, McKenna WJ, Abrams DJ, et al. 2019 HRS expert consensus statement on evaluation, risk stratification, and management of arrhythmogenic cardiomyopathy. *Heart Rhythm* 2019;16:e301–72. https://doi.org/10.1016/j.hrthm.2019.05.007; PMID: 31078652.

Important Clinical Trials

1. Packer DL, Mark DB, Robb RA, et al. Effect of catheter ablation vs antiarrhythmic drug therapy on mortality, stroke, bleeding, and cardiac arrest among patients with atrial fibrillation, the CABANA randomized clinical trial. *JAMA* 2019;321:1261–74. https://doi.org/10.1001/jama.2019.0693; PMID: 30874766.
2. Katritsis DG, Zografos T, Siontis KC, et al. Endpoints for successful slow pathway catheter ablation in typical and atypical atrioventricular nodal re-entrant tachycardia: a contemporary, multicenter study. *JACC Clin Electrophysiol* 2019;5:113–9. https://doi.org/10.1016/j.jacep.2018.09.012; PMID: 30678775.
3. Kuck KH, Merkely B, Zahn R, et al. Catheter ablation versus best medical therapy in patients with persistent atrial fibrillation and congestive heart failure: the randomized AMICA trial. *Circ Arrhythm Electrophysiol* 2019;12:e007731. https://doi.org/10.1161/CIRCEP.119.007731; PMID: 31760819.
4. Siontis KC, Zhang X, Eckard A, et al. Outcomes associated with apixaban use in patients with end-stage kidney disease and atrial fibrillation in the United States. *Circulation* 2018;138:1519–29. https://doi.org/10.1161/CIRCULATIONAHA.118.035418; PMID: 29954737.
5. Blomström-Lundqvist C, Gizurarson S, Schwieler J, et al. Effect of catheter ablation vs antiarrhythmic medication on quality of life in patients with atrial fibrillation: the CAPTAF randomized clinical trial. *JAMA* 2019;321:1059–68. https://doi.org/10.1001/jama.2018.15356; PMID: 30874754.
6. Cadrin-Tourigny J, Bosman LP, Nozza A, et al. A new prediction model for ventricular arrhythmias in arrhythmogenic right ventricular cardiomyopathy. *Eur Heart J* 2019;40:1850–8. https://doi.org/10.1093/eurheartj/ehz103; PMID: 30915475.
7. Barra S, Duehmke R, Providencia R, et al. Very long-term survival and late sudden cardiac death in cardiac resynchronization therapy patients. *Eur Heart J* 2019;40:2121–7. https://doi.org/10.1093/eurheartj/ehz238; PMID: 31046090.
8. Andrade JG, Champagne J, Dubuc M, et al. Cryoballoon or radiofrequency ablation for atrial fibrillation assessed by continuous monitoring: a randomized clinical trial. *Circulation* 2019;140:1779–88. https://doi.org/10.1007/s40278-019-71404-1; PMID: 31630538.

The Future?

1. Perez MV, Mahaffey KW, Hedlin H, et al. Large-scale assessment of a smartwatch to identify atrial fibrillation. *N Engl J Med* 2019;381:1909–17. https://doi.org/10.1056/NEJMoa1901183; PMID: 31722151.
2. Guo Y, Wang H, Zhang H, et al. Mobile photoplethysmographic technology to detect atrial fibrillation. *J Am Coll Cardiol* 2019;74:2365-2375. https://doi.org/10.1016/j.jacc.2019.08.019; PMID: 31487545.
3. Willems S, Verma A, Betts T, et al. Targeting non-pulmonary vein sources in persistent atrial fibrillation identified by noncontact charge density mapping: the UNCOVER AF trial. *Circ Arrhythm Electrophysiol* 2019;12:e007233. https://doi.org/10.1161/CIRCEP.119.007233; PMID: 31242746.
4. Reddy VY, Neuzil P, Koruth JS, et al. Pulsed field ablation for pulmonary vein isolation in atrial fibrillation. *J Am Coll Cardiol* 2019;74:315–26. https://doi.org/10.1016/j.jacc.2019.04.021; PMID: 31085321.
5. Honarbakhsh S, Hunter RJ, Ullah W, et al. Ablation in persistent atrial fibrillation using stochastic trajectory analysis of ranked signals (STAR) mapping method. JACC Clin Electrophysiol 2019;5:817–29. https://doi.org/10.1016/j.jacep.2019.04.007; PMID: 31320010.
6. Grace A, Willems S, Meyer C, et al. High-resolution noncontact charge-density mapping of endocardial activation. *JCI Insight* 2019;4:e126422. https://doi.org/10.1172/jci.insight.126422; PMID: 30895945.

