2019 ESC Guidelines on: Supraventricular Tachycardias (SVT).

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Introduction

Supraventricular tachycardias (SVT) (atrial rate >100bpm) are common (35/100,000 person years). It often affects individuals >65 years old, being five times more common compared to younger individuals. Females suffered twice as often as males. Palpitations, fatigue, lightheadedness, chest tightness, dyspnoea and altered consciousness are the usual symptoms, in descending order of frequency. AVNRT (atrio-ventricular nodal reentrant tachycardia), atrial flutter and AVRT (atrio-ventricular reentrant tachycardia) are, in descending order of incidence, the SVTs managed in electrophysiology cath lab by specialised centres. SVTs are broadly divided into wide (>120ms) and narrow (≤120ms) QRS tachycardias. They arise due to enhanced automaticity, triggered activity or re-entry. The current guideline from ESC provides a clear pathway for management of individual SVTs.

What's new in the 2019 guidelines

1. Atrial flutter: Ibutilide or dofetilide are first choice of medicines recommended for conversion of atrial flutter. Anticoagulation should be considered for atrial flutter without AF but risk stratification may not be identical to the case in AF, so the threshold of initiation is not ~~to~~ accurately risk

vasively (IIb), i.e. exercise test.

5. Postural orthostatic tachycardia syndrome: ivabradine can be used for postural orthostatic tachycardia syndrome (POTS).

6. Catheter ablation: Pace (CRT or His-pacing) and ablate (AV nodal ablation) strategy is recommended for tachycardiomyopathy, where the responsible tachycardia cannot be ablated or controlled with medicine.

7. Pregnancy with SVT: Antiarrhythmic medications are avoided during the first trimester of pregnancy. Beta 1 selective blocker or verapamil, in order of preference, should be considered for prevention of SVT without ve5 0 -1.32o pridern oroVVturpr8nsbe usrhyon of ST without v

8. AVNRT: Intranasal etripamil can be used to achieve normal rhythm. Propafenone and amiodarone have been removed from acute management of AVNRT. Digoxin, sotalol, dofetilide, propafenone and amiodarone are not mentioned for chronic therapy.

9. AVRT: Amiodarone is contraindicated in pre-excited AF but can be considered for refractory antidromic AVRT cases. Catheter ablation is recommended in asymptomatic patients with an accessory pathway effective refractory period ≤250ms (in contrast to <240ms in ACC/AHA/HRS 2015 guidance). ESC 2019 mentions those with asymptomatic pre-excitation, who are at low risk of SCD, which can be identified by normalisation of PR interval and loss of delta wave during exercise test or following procainamide, disopyramide or propafenone administration.

10. SVT in ACHD patients: Dofetilide, ibutilide, propafenone and sotalol have been removed to treat acute management of AT or SVT. Sotalol is contraindicated for chronic management of SVT or atrial flutter. Ibutilide for chronic therapy of SVT is not mentioned in new guidance.

11. SVT in pregnancy: Beta 1 selective blocker, digoxin or ibutilide can be used for acute therapy. Verapamil, procainamide and amiodarone are not mentioned in the ESC 2019 guidance.

ACC/AHA/HRS 2015 guidance highlights the ongoing management of undifferentiated (“undiagnosed