Table 2. Supraventricular Tachycardia Summary Table

Type of Rhythm	Etiology	ECG Features	Treatment	Miscellaneous
SINUS TACHYCARDIA	• Stress response to fever, pain, hypoxia, dehydration, anemia, exercise, infection	• Heart rate >100 bpm • Gradual increase & decrease • P wave morphology similar to sinus rhythm	• Correcting the underlying stressor	
INAPPROPRIATE SINUS TACHYCARDIA	• Exaggerated heart rate response to minimal stress	• P waves similar to sinus rhythm and sinus tachycardia • Resting sinus tachycardia	• Vagal maneuvers • β-blockers • Calcium channel blockers • Ablation	• Rare tachyarrhythmia • Seen in young women • Rule out hyperthyroidism
SINUS NODE REENTRANT TACHYCARDIA (SNRT)	• Reentry circuit established close to the sinus node	• Heart rate 100-150 bpm • Abrupt onset and termination • P waves similar to sinus rhythm	• β-blockers • Calcium channel blockers • Ablation	• Rare disorder
ATRIAL TACHYCARDIA	• Increased automaticity, reentry, or triggered activity induce this arrhythmia.	• Regular rate and rhythm • P wave is different than sinus rhythm	• Vagal maneuvers, adenosine • β-blockers • Calcium channel blockers • Class Ia, Ic, III • Ablation • Rapid atrial pacing	• Digoxin toxicity is associated with atrial tachycardia.
MULTIFOCAL ATRIAL TACHYCARDIA (MAT)	• Associated with chronic obstructive pulmonary disease, hypoxia, and cardiac diseases	• Three or more types of P waves • Rhythm is irregularly irregular	• Correct the underlying cardiac and pulmonary diseases	• May be confused with atrial fibrillation; P waves should assist in differentiating MAT from atrial fibrillation
ATRIAL FLUTTER	• Reentrant circuit induces this arrhythmia. • Involves the atrial tissue only • Associated with myocarditis, pulmonary embolism, myocardial infarction, cardiomyopathy, alcohol, ischemia	• Sawtooth flutter waves • Atrial rate may range from 250 to 350 bpm • Regular rhythm • Normal QRS complexes	• Hemodynamic instability requires immediate cardioversion • Rate control with β-blockers, calcium channel blockers, digoxin, amiodarone • Chemical conversion (< or > 48 hours) with ibutilide, procainamide, amiodarone • Anticoagulation if > 48 hrs	• Usually atrial to ventricular conduction ratio is either 4:1 or 2:1. • Flutter can proceed to atrial fibrillation.
ATRIAL FIBRILLATION	• Associated with mitral valve prolapse/regurgitation, hypertension, ischemia, rheumatic heart disease, alcohol, pericarditis, digitalis toxicity	• Irregularly irregular rhythm • Fibrillatory waves • Atrial rate can range from 300 to 600 bpm	• Hemodynamic instability = immediate cardioversion • Rate control with β-blockers, calcium channel blockers, digoxin, amiodarone • Chemical conversion (< or > 48 hours) with ibutilide, procainamide, amiodarone • Anticoagulation if > 48hrs	• Most common arrhythmia • Increased risk of thromboembolic phenomenon
AV NODAL REENTRANT TACHYCARDIA (AVNRT)	• Reentry circuit induces this tachyarrhythmia. • Associated with rheumatic heart disease, pericarditis, myocardial infarction, mitral valve prolapse	• Heart rate ranges between 150 and 250 bpm • P wave in QRS complex or shortly after • Short RP interval in typical AVNRT • Normal QRS complex	• Vagal maneuvers • Adenosine • Calcium channel blockers (verapamil, diltiazem) • β-blockers • Cardioversion for unstable patients • Class Ia, Ic, III, or ablation for long-term management	• More common in females and in middle-aged people
AV REENTRANT TACHYCARDIA(AVRT)	• Accessory tracts result in preexcitation syndromes and reentry. • Epstein's anomaly	• WPW syndrome—short PR interval, delta wave • Short RP interval, P wave following QRS complex • Wide QRS in antidromic conduction and narrow QRS in orthodromic	• Vagal maneuvers • Adenosine & verapamil (caution, as can induce atrial fibrillation or V. fibrillation) • Procainamide for wide QRS complexes • Ablation	• More common in young adults • More common in males • Verapamil is contraindicated in wide QRS complex tachycardia as seen with antidromic conduction