



Supraventricular Tachycardia

COG
A-28

History:

- Medications
(Aminophylline, Diet pills, Thyroid supplements, Decongestants, Digoxin)
- Diet (caffeine, chocolate)
- Drugs (nicotine, cocaine)
- Past medical history
- History of palpitations / heart racing
- Syncope / near syncope

Signs and Symptoms:

- HR greater than 150/Min
- **QRS less than 0.12 Sec (QRS greater than 0.12 sec go to V-Tach Protocol)**
- **If history of WPW, go to V-Tach Protocol**
- Dizziness, CP, SOB
- Potential presenting rhythm
Sinus tachycardia
Atrial fibrillation / flutter
Multifocal atrial tachycardia

Differential:

- Heart disease (WPW, Valvular)
- Sick sinus syndrome
- Myocardial infarction
- Electrolyte imbalance
- Exertion, Pain, Emotional stress
- Fever
- Hypoxia
- Hypovolemia or Anemia
- Drug effect / Overdose (see Hx)
- Hyperthyroidism
- Pulmonary embolus



Universal Patient Care Protocol



**“ QRS > 0.12 sec.
Follow
Wide Complex
Tachycardia with
Pulse Protocol**

QRS > 0.12 sec
OR
History of WPW

Stable

Unstable

(CASH criteria)

S	System Responder	S
B	EMT - B	B
P	EMT-P	P
CC	EMT-CCP	CC
M	Medical Control Contact Required	M

P	12 Lead ECG	P
P	Valsalva's maneuver initially and after each drug administration	P
P	Adenosine 6 mg rapid IVP. May repeat in 10 min. x 1 at 12 mg rapid IVP. (10 mL flush after each dose.)	P

P	(If readily available and conditions permit) Consider Adenosine 12 mg rapid IV,(10 mL flush after each dose)	P
P	Consider sedation for Cardioversion Midazolam 1 mg IV over 3 min.prn, (Max. dose 2.5 mg, 1.5 mg in elderly/ill.) or Lorazepam 0.25-1 mg IV	P
P	Synchronized Cardioversion @100J. Repeat PRN escalating to 200J, 300J, then 360J with successive shocks.	P

P	Diltiazem 0.25 mg/kg IV over 2 minutes (Max dose 20 mg) May repeat x1 at 0.35mg/kg IV q 15 min. (Max dose 25mg)	P
P	12 Lead ECG	P



**Any change in rhythm,
go to appropriate Protocol**

M	Contact Destination or Medical Control for assistance	M
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Pearls:

- If patient has history of or 12 Lead ECG reveals Wolfe Parkinson White (WPW), DO NOT administer Diltiazem, go to VT with Pulse.
- If patient requires multiple conversion attempts without resolution consider alternative cause of dysrhythmia
- Adenosine may not be effective in identifiable atrial flutter/fibrillation, but is not harmful.
- Monitor for respiratory depression and hypotension associated with **Midazolam & Lorazepam**. ****Pulse OX and Capnography Mandatory!** Be prepared to assist ventilations especially if **Midazolam** is used.
- Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention.
- Serious S/S are uncommon with HR < 150. Patients with impaired cardiac function may become symptomatic at lower HR.
- **Lorazepam and Midazolam Doses** are to be titrated to effect, maintaining SBP >100 mmHg and/or peripheral pulses present. Always use **smallest dose** possible to achieve desired effect.