

Narrow Complex Tachycardia

History

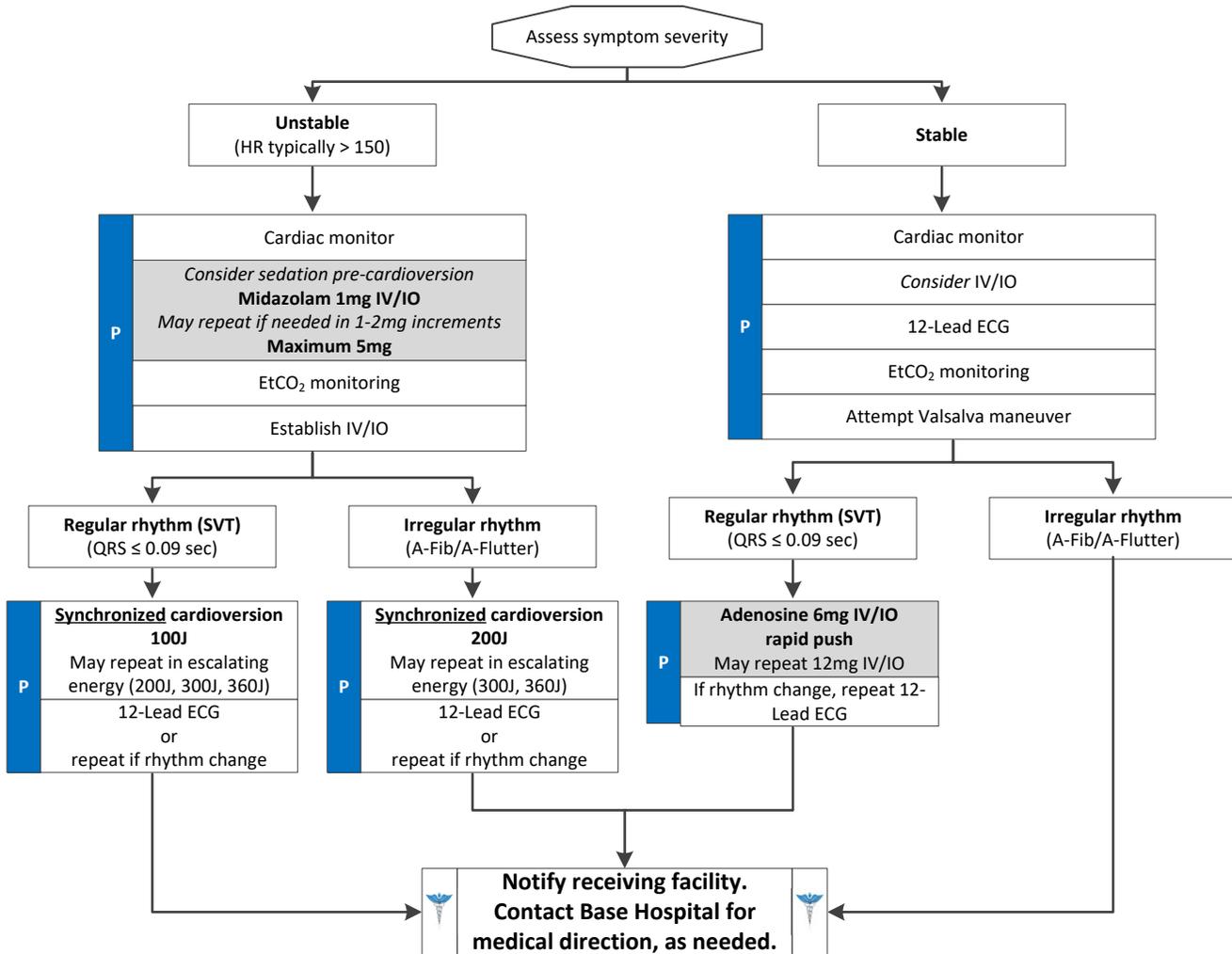
- Medications (e.g. Aminophylline, Adderall, diet pills, thyroid supplements, decongestants, and Digoxin)
- Diet
- Drugs (e.g. nicotine and illegal drugs)
- Past medical history
- History of palpitations/heart racing
- Syncope/near syncope

Signs and Symptoms

- Heart rate > 150 with narrow, regular complexes
- Systolic BP < 90
- Dizziness, chest pain, shortness of breath, altered mental status, or diaphoresis
- CHF
- Potential presenting rhythm:
 - Atrial/sinus tachycardia
 - Atrial fibrillation/flutter
 - Multifocal atrial tachycardia
 - Ventricular tachycardia

Differential

- Heart disease (e.g. WPW or valvular)
- Sick sinus syndrome
- Myocardial infarction
- Electrolyte imbalance
- Exertion, pain, or emotional stress
- Fever
- Hypoxia
- Hypovolemia or anemia
- Drug effect/overdose (see **History**)
- Hypothyroidism
- Pulmonary embolus



Adult Cardiac Treatment Guidelines



Narrow Complex Tachycardia

Pearls

- Most important goal is to differentiate the type of tachycardia and if STABLE or UNSTABLE.
- If at any point the patient becomes unstable, move to the unstable arm of the algorithm.
- For ASYMPTOMATIC patients (or those with only minimal symptoms, such as palpitations) and any tachycardia with a rate of approximately 100 – 120 with a normal blood pressure, consider CLOSE OBSERVATION or fluid bolus rather than immediate treatment with an anti-arrhythmic medication. For example, a patient's "usual" atrial fibrillation may not require emergent treatment.
- All Adenosine administrations should be immediately followed by a 20ml rapid flush.
- Typical sinus tachycardia is in the range of 100 to (200 – the patient's age) beats per minute.
- Symptomatic tachycardia usually occurs at rates of 120 – 150 and typically ≥ 150 beats per minute. Patients who are symptomatic with heart rates < 150 likely have impaired cardiac function, such as CHF.
- Serious Signs / Symptoms include: Hypotension; acutely altered mental status; signs of shock/poor perfusion; chest pain with evidence of ischemia (e.g. STEMI, T-wave inversions or depressions); and acute CHF.
- Search for underlying cause of tachycardia such as fever, sepsis, dyspnea, etc.
- If patient has a history or if 12-Lead ECG reveals Wolfe Parkinson White (WPW), use caution with Adenosine and give only with a defibrillator immediately available.
- Regular Narrow-Complex Tachycardias:
 - Adenosine may be considered to assist with rhythm diagnosis or if a patient has a history of Adenosine conversion.
 - Adenosine may not be effective with atrial fibrillation/flutter, yet is not harmful and may help identify rhythm.
- Synchronized Cardioversion is recommended to treat UNSTABLE atrial fibrillation/flutter and monomorphic-regular tachycardia (SVT).
- Monitor for respiratory depression and hypotension associated with Midazolam.
- Continue pulse oximetry and EtCO₂ monitoring is required for all narrow complex tachycardia patients.
- Providers must export all monitor data to EHR when caring for and treating narrow complex tachycardia patients.

