Atrial Fibrillation with Rapid Ventricular Response

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

**Signs and Symptoms:**
- HR > 150/Min
- QRS less than 0.12 sec
- QRS greater than 0.12 sec or history of WPW go to V-Tach with pulse Protocol
- Dizziness, CP, SOB
- Syncope / near syncope

**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**

- **Wide Complex Tachycardia w/ Pulse Protocol**
  - QRS greater than 0.12 sec OR History of WPW
  - Pre-Arrest (Severely altered or No palpable BP)
  - Stable
  - **Consider**
    - Diltiazem 0.25 mg/kg IV over 2 minutes (Max = 20 mg)
    - If unsuccessful after 15 min. Diltiazem 0.35 mg/kg over 2 minutes (Max = 25 mg)

- **12 Lead ECG**
  - After rate control or conversion

- **Contact Destination or Medical Control for further orders**

**Pearls:**
- If patient has history of or 12 Lead ECG reveals Wolfe Parkinson White (WPW), DO NOT administer Diltiazem.
- Adenosine may not be effective in identifiable atrial flutter/fibrillation, but is not harmful.
- Monitor for hypotension after administration of Diltiazem.
- 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.
- 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.
- Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention.
- Continuous pulse oximetry is required for all Atrial Fibrillation Patients.
- Rapid ventricular response is defined as rate > 100 however rate related signs and symptoms are uncommon with HR ≤ 150/min in patients with healthy heart. Consider rate control at lower heart rates if symptomatic.