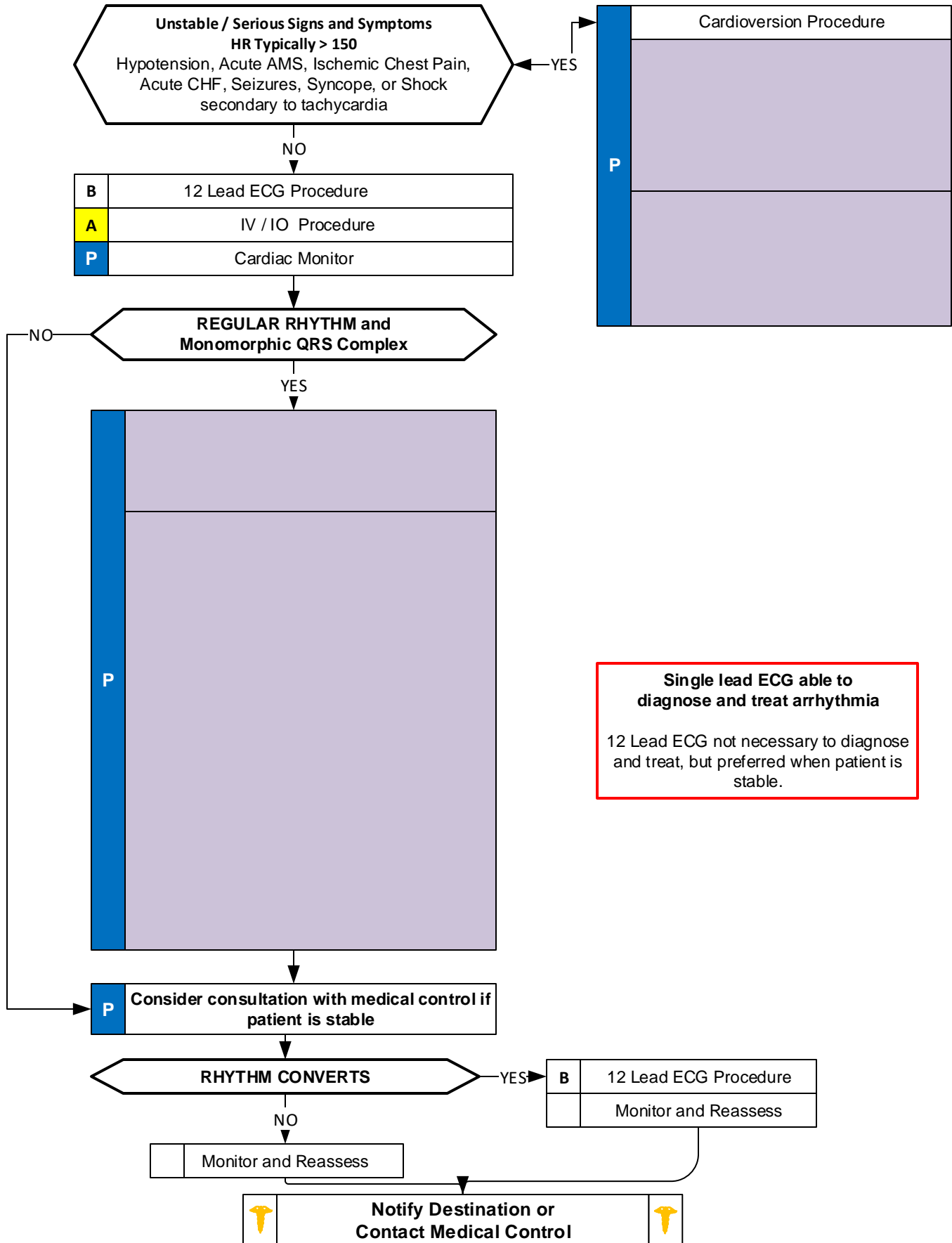


Adult Tachycardia

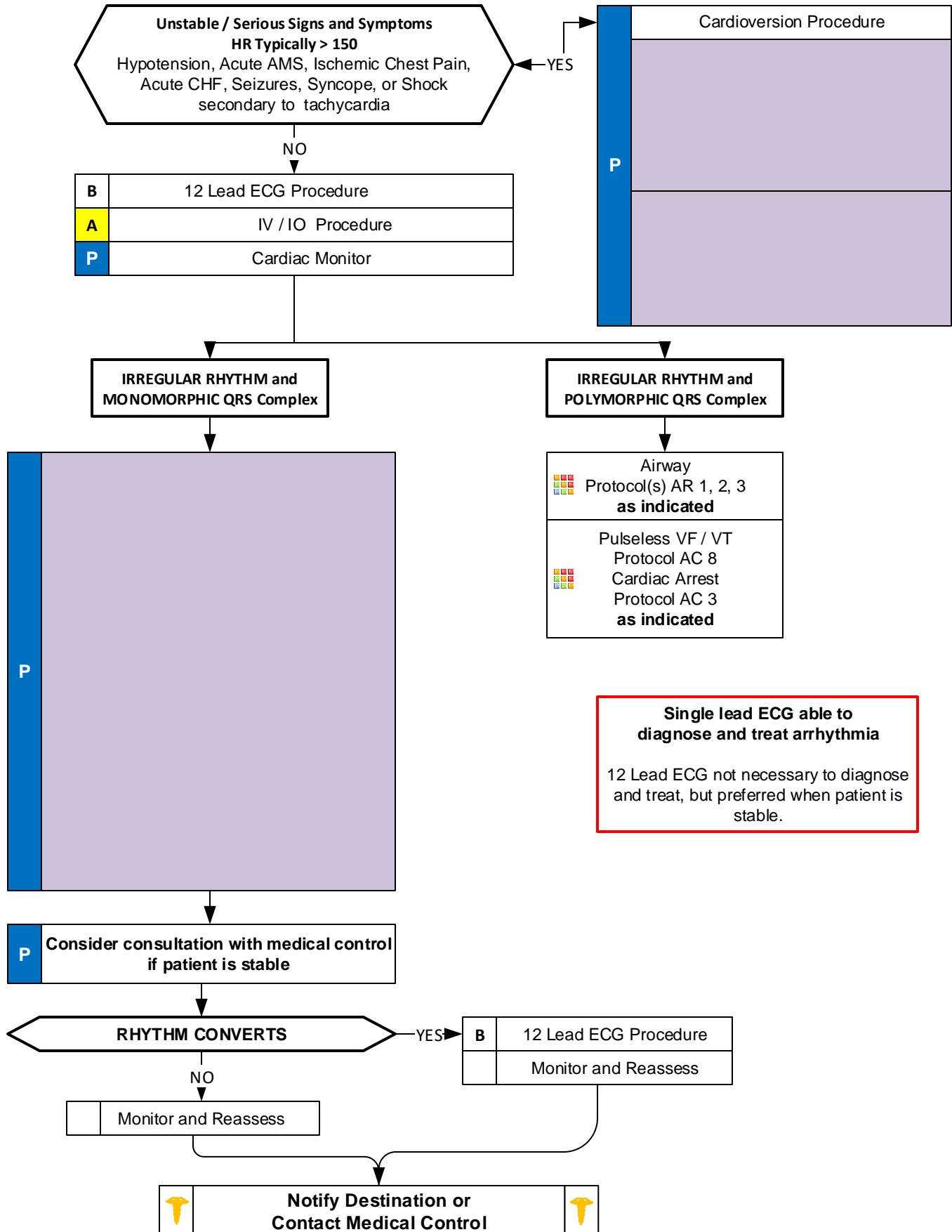
Wide Complex (≥ 0.12 sec) REGULAR RHYTHM





Adult Tachycardia

Wide Complex (≥ 0.12 sec) IRREGULAR RHYTHM





Adult Tachycardia

Wide Complex (≥ 0.12 sec)

Pearls

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
- **Most important goal is to differentiate the type of tachycardia and if STABLE or UNSTABLE and SYMPTOMATIC.**
- **Rhythm should be interpreted in the context of symptoms**
- **Unstable condition**
 - **Condition which acutely impairs vital organ function and cardiac arrest may be imminent.**
 - **If at any point patient becomes unstable move to unstable arm in algorithm.**
- **Symptomatic condition**

Arrhythmia is causing symptoms such as palpitations, lightheadedness, or dyspnea, but cardiac arrest is not imminent.

Symptomatic tachycardia usually occurs at rates ≥ 150 beats per minute. Patients symptomatic with heart rates < 150 likely have impaired cardiac function such as CHF.
- **Serious Signs / Symptoms:**

Hypotension. Acutely altered mental status. Signs of shock / poor perfusion. Chest pain with evidence of ischemia (STEMI, T wave inversions or depressions.) Acute congestive heart failure.
- Search for underlying cause of tachycardia such as fever, sepsis, dyspnea, etc.
- If patient has history or 12 Lead ECG reveals Wolfe Parkinson White (WPW), DO NOT administer a Calcium Channel Blocker (e.g., Diltiazem) or Beta Blockers. Use caution with Adenosine and give only with defibrillator available.
- Search for underlying cause of tachycardia such as fever, sepsis, dyspnea, etc.
- Typical sinus tachycardia is in the range of 100 to (220 – patients age) beats per minute.
- **Regular Wide-Complex Tachycardias:**
 - **Unstable condition:**

Immediate defibrillation if pulseless and begin CPR.
 - **Stable condition:**

Typically VT or SVT with aberrancy. Adenosine may be given if regular and monomorphic and if defibrillator available.

Verapamil contraindicated in wide-complex tachycardias.

Agencies using Amiodarone, Procainamide and Lidocaine need choose one agent primarily. Giving multiple anti-arrhythmics requires contact of medical control.

Atrial arrhythmias with WPW should be treated with Amiodarone or Procainamide
- **Irregular Tachycardias:**

Wide-complex, irregular tachycardia: Do not administer calcium channel, beta blockers, or adenosine as this may cause paradoxical increase in ventricular rate. This will usually require cardioversion. Contact medical control.
- **Polymorphic / Irregular Tachycardia:**

This situation is usually unstable and immediate defibrillation is warranted.

When associated with prolonged QT this is likely Torsades de pointes: Give 2 gm of Magnesium Sulfate slow IV / IO.

Without prolonged QT likely related to ischemia and Magnesium may not be helpful.
- Document all rhythm changes with monitor strips and obtain monitor strips with each therapeutic intervention.