

# TACHYCARDIA

**ASSESS with ABCDE approach**

- Give oxygen if SpO<sub>2</sub> < 94% and obtain IV access
- Monitor ECG, BP, SpO<sub>2</sub>. Record 12 lead ECG
- Identify and treat reversible causes (e.g. electrolyte abnormalities, hypovolaemia causing sinus tachycardia)

**Life-threatening features?**

1. Shock
2. Syncope
3. Myocardial ischaemia
4. Severe heart failure

YES

**Synchronised shock up to 3 attempts**

- Sedation, anaesthesia if conscious

*If unsuccessful:*

- Amiodarone 300 mg IV over 10-20 min, or procainamide 10-15 mg/kg IV over 20 min;
- Repeat synchronised shock

**UNSTABLE**

NO

**STABLE**   
SEEK EXPERT HELP

**Is QRS narrow (<0.12 s)?**

**Broad QRS**  
Is QRS regular?

**Narrow QRS**  
Is QRS regular?

**Irregular**

**Regular**

**Regular**

**Irregular**

**Possibilities include:**

- Atrial fibrillation with bundle branch block – treat as for irregular narrow complex
- Polymorphic VT (e.g. torsades de pointes) – give magnesium 2 g over 10 min

**If VT (or uncertain rhythm):**

- Procainamide 10-15 mg/kg IV over 20 min or
- Amiodarone 300 mg IV over 10-60 min

**If previous certain diagnosis of SVT with bundle branch block/ aberrant conduction:**

- Treat as for regular narrow complex tachycardia

**Vagal manoeuvres**

**If ineffective:**

**Adenosine (if no pre-excitation)**

- 6 mg rapid IV bolus;
- If unsuccessful give 12 mg
- If unsuccessful give IV 18 mg

**Probable atrial fibrillation:**

- Control rate with beta-blocker or diltiazem
- Consider digoxin or amiodarone if evidence of heart failure
- Anticoagulate if duration > 48h

**If ineffective:**

- Verapamil or beta-blocker

**If ineffective:**

- Synchronised DC shock up to 3 attempts
- Sedation, anaesthesia if conscious