12 Tachycardia - Unstable

Persistent tachycardia with hypotension, ischemic chest pain, altered mental status or shock

START

❶ Call for help and a code cart/defibrillator

- ▶ **Ask:** ***"Who will be the crisis manager?"***

❷ Turn FiO_2 to 100% and turn down volatile anesthetics

❸ Analyze rhythm

- If wide complex, irregular: Treat as VF, go to ▷ CHKLST 5
- Otherwise: prepare for cardioversion

❹ Prepare for immediate synchronized cardioversion

1. Sedate all conscious patients unless deteriorating rapidly
2. Turn monitor/defibrillator ON, set to defibrillator mode
3. Place electrodes on chest
4. Engage synchronization mode
5. Look for mark/spike on the R-wave indicating synchronization mode
6. Adjust if necessary until SYNC markers seen with each R-wave

❺ Cardiovert at appropriate energy level

1. Determine appropriate energy level using Cardioversion table at right.
   Begin with lowest energy level and progress as needed.
2. Select energy level
3. Press charge button
4. Press and hold shock button
5. Check monitor. If tachycardia persists, increase energy level
6. Engage synchronization mode after delivery of each shock

❻ Consider expert consultation – Cardiology Fellow (Amion, Remis)

BIPHASIC CARDIOVERSION energy levels

CONDITION	ENERGY LEVEL (progression)
Narrow complex, regular	50 J → 100 J → 150 J → 200 J
Narrow complex, irregular	120 J →150 J → 200 J
Wide complex, regular	100 J → 150 J → 200 J
Wide complex, irregular	Treat as VF: Go To: ▷ CHKLST 5

Critical CHANGES

If **cardioversion needed and impossible to synchronize** shock, use high-energy unsynchronized shocks.

Defibrillation doses:

- Biphasic: Follow manufacturer recommendation; If unknown use highest setting
- Monophasic: 360J

If cardiac arrest:
Go to:
▷ CHKLST 5 Cardiac Arrest – VF/VT
▷ CHKLST 4 Cardiac Arrest – Asystole/PEA

During RESUSCITATION

Airway: Assess and secure

Circulation:
- Confirm adequate IV or IO access
- Consider IV fluids wide open