

1. Premature Ventricular Contractions (PVCs)

What it is

- Early ventricular beat that interrupts the normal rhythm

ECG Characteristics

- Wide, bizarre QRS
- No P wave before the beat
- Compensatory pause after

Common Causes

- Stress, caffeine
- Hypoxia
- Electrolyte imbalance ($\downarrow K^+$, $\downarrow Mg^{2+}$)
- Heart disease

Clinical Significance

- Often benign if occasional
- Frequent PVCs can \downarrow cardiac output

Basic Nursing Actions

- Assess patient (symptoms?)
- Check electrolytes
- Reduce triggers (caffeine, stress)
- Monitor frequency and pattern

2. Ventricular Tachycardia (VT)

a. Monomorphic VT

What it is

- Fast rhythm from ventricles with same-looking QRS complexes

ECG Characteristics

- Rate: 100–250 bpm
- Wide QRS
- Regular rhythm
- No visible P waves

Clinical Significance

- May have a pulse or be pulseless
- Can progress to ventricular fibrillation

Basic Nursing Actions

- Check pulse immediately
- If pulse present → prepare for meds/cardioversion
- If no pulse → start CPR, call code

b. Polymorphic VT (Torsades de Pointes)

What it is

- VT with changing QRS shapes (“twisting of points”)

ECG Characteristics

- Irregular, varying amplitude QRS
- Prolonged QT interval beforehand

Common Causes

- Hypomagnesemia
- QT-prolonging drugs

Basic Nursing Actions

- Stop QT-prolonging meds
- Administer magnesium as ordered
- Continuous monitoring

3. Ventricular Fibrillation (VF)

What it is

- Chaotic, uncoordinated ventricular activity

ECG Characteristics

- No identifiable P, QRS, or T waves
- Irregular, wavy baseline

Clinical Significance

- No cardiac output
- Medical emergency

Basic Nursing Actions

- Call code immediately
- Start CPR
- Defibrillate ASAP
- Administer ACLS meds

4. Asystole

What it is

- Absence of ventricular activity (“flatline”)

ECG Characteristics

- No electrical activity
- Straight or nearly straight line

Clinical Significance

- No pulse, no cardiac output
- Poor prognosis

Basic Nursing Actions

- Verify leads and connections
- Begin CPR
- Administer epinephrine per protocol
- No defibrillation

Basic Ventricular Dysrhythmia Assessment (Assignment-Style)

When identifying a ventricular rhythm, ask:

1. Rate – Fast, slow, or absent?
2. Rhythm – Regular or irregular?
3. P waves – Present or absent?
4. QRS width – Narrow or wide?
5. Patient status – Pulse? BP? LOC?

Basic Nursing Assignment Example

Patient Presentation

- Telemetry shows wide-complex tachycardia at 160 bpm
- Patient is dizzy and hypotensive

Your Actions

1. Assess airway, breathing, circulation
2. Check for pulse
3. Apply oxygen
4. Notify provider / activate rapid response
5. Prepare for cardioversion if ordered
6. Document rhythm and patient response