DEFINITIONS:

- **Transvenous** & **epicardial** pacing are temporary methods of supporting brady- & tachydysrhythmias until resolution or definitive treatment (such as a permanent implanted pacemaker) can be implanted.

- **Transvenous** and **epicardial** pacing are more reliable and more durable treatments than **transcutaneous** pacing. (Both are pictured, though would not be used simultaneously.)

USES:

- Pacing can be used to support patients with severe **bradycardia** or **heart block** leading to hemodynamic compromise. HB or bradycardia may be due to surgery, MI, electrolyte disturbances, toxicities.

- **Overdrive pacing** is a technique for suppressing arrhythmias (such ventricular tachycardia or Torsades de pointes) by selecting a rate faster than the arrhythmia to overdrive suppress it then decreasing the rate once the dysrhythmia is suppressed.

INITIATING PACING:

1. Set the **MODE** to asynchronous (either VOO or DOO)
2. Set the desired **RATE** (should be more than the native HR to initiate pacing; typically 80 bpm).
3. Set the **OUTPUT** to the maximum energy & confirm mechanical **CAPTURE** (feel a pulse, look pulseOx/Aline waveform)
4. Determine **THRESHOLD** by decreasing **OUTPUT** until capture is lost; set the **OUTPUT** to twice the **THRESHOLD**
5. Change to a sensing **MODE** (either VVI or DDD)
6. Adjust **SENSITIVITY** until the native complexes are detected
7. Temporarily decrease **RATE** to be less than the native HR
8. Initiate emergency pacing
9. Repeat daily

SETTING THE PACER AS A BACKUP:

- **DRR** can be used when sensing is not reliable
- **Loss of atrial kick**
- **Risk of R on T**
- **Risk of endless loop tachycardia**
- **Maintains atrial kick & resistant to interference**
- **Risk of R on T phenomenon**