### Arrhythmia Recognition

#### Premature Ventricular Conduction

**Right Ventricular PVC**

**Left Ventricular PVC**

#### Pacemaker Lead Placement

**Pacemaker Lead**

#### ST Segment Depression

**Downsloping ST**

**Upsloping ST**

**Horizontal ST**

The ST segment begins at the J point and extends to a user-defined interval.

#### Ventricular Rhythms

<table>
<thead>
<tr>
<th>Premature Ventricular Complex (PVC)</th>
<th>Ventricular Fusion Beat</th>
<th>Ventricular Escape Beat</th>
<th>AV Sequencal Pacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Rhythm</td>
<td>P Wave</td>
<td>PR Interval</td>
</tr>
<tr>
<td>60-100 bpm</td>
<td>Identical shape</td>
<td>0-16 ms</td>
<td>0-12 ms</td>
</tr>
</tbody>
</table>

**Multifocal PVCs**

- **Identical shape**
- **More than one shape**

**Paired PVCs (Couple)**

- **R on T Phonomenon**: PVC occurs at the peak of the T wave of the preceding beat.

**Atrioventricular Block**

- **Every other beat is a PVC**

**Ventricular Tachycardia**

- **3 or more consecutive ventricular complexes**

**Ventricular Bradycardia**

- **Every third beat is a PVC**

**Ventricular Fibrillation**

- **Ventricular Anystole**

#### Pacemaker Rhythms

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<th>Electronic Pacemaker Spike</th>
<th>Ventricular Pacemaker (single chamber)</th>
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**Electronic Pacemaker Spike**

- Electrical stimuli delivered to the cardiac tissue to generate an ejection force.

**Ventricular Pacemaker (single chamber)**

- Single spike producing a wide QRS complex.

**AV Sequential Pacemaker (double chamber)**

- Free spike followed by a paced P wave (atrioventricular interval).

**Failure to Capture**

- The pacemaker generates an appropriate spike but does not sense or capture the ventricular complex.

**Failure to Sense**

- The pacemaker does not recognize the intrinsic cardiac activity, or the sensed signal is not of adequate amplitude.

**Failure to Fire**

- The pacemaker does not generate a pacemaker spike when it is needed.

#### ECG Artifacts

- **Respiratory inversion**
- **Muscle Torsion (Somatic)**
- **Movement artifacts**
- **Electrical interference**
- **AC interference (50/60 Hz cycle)**
- **Muscle artifact**
- **Wandering baseline**
- **Electronic interferance caused by external sources**
- **Biometrics and electronic devices**

### Arrhythmia Recognition (poster 2 of 2)

This poster includes information about Premature Ventricular Conduction, Pacemaker Lead Placement, ST Segment Depression, Ventricular Rhythms, Pacemaker Rhythms, Full Compensatory Pause and ECG Artifacts.

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