ED APPROACH TO PACEMAKER ECGs

GOLDEN RULE: ALWAYS GO THROUGH YOUR USUAL ECG APPROACH EVEN FOR PACED ECGs

1. WHAT IS THE RATE?
   - FAST
     - NORMAL RESPONSE
       - ATRIAL ARRHYTHMIA
       - PACEMAKER-MEDIATED TACHYCARDIA
       - SENSOR-INDUCED TACHYCARDIA
   - SLOW
     - FAILURE TO CAPTURE (FTC)
     - FAILURE TO PACIE (FTP)

2. IS THERE A P WAVE OR QRS COMPLEX FOLLOWING EVERY PACER SPIKE?
   - NO
     - FAILURE TO CAPTURE (FTC)
   - YES

3. ARE PACER SPIKES SEEN THROUGHOUT WITH NO SINUS PAUSES OR ASYSTOLE?
   - NO
     - FAILURE TO PACIE (FTP)
   - YES

4. ARE THERE PACER SPIKES DURING OR FOLLOWING NATIVE CARDIAC ACTIVITY?
   - NO
     - APPROPRIATE PACING ON ECG
   - YES
     - FAILURE TO SENSE (FTS) OR UNDER-SENSING

DDx: FTC
- hardware problem (lead #/inadequate contact, battery issue)
- exit block (increased threshold of electrode attachment site)
- medical issue (e.g., electrolytes, drugs, MI)

DDx: FTP
- hardware problem (e.g., pulse generator, battery or insulation malfunction)
- over-sensing (e.g., sensing myopotentials, other chambers or T-waves)

DDx: FTS/UNDER-SENSING
- hardware problem (e.g., lead #/inadequate contact, insulation problem)
- low native voltages