

Goals:

- 1. Address one of the most commonly confusing concepts in brady pacing
- 2. How to approach an unknown beat by beat
- 3. Moving from a 'generic' diagnosis to a specific etiology
- 4. To be specific with terminology

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The abnormality that must first be recognized is intermittent ventricular undersensing. However, the presence of 'Autocapture' with backup pulses results in a confusing tracing. Furthermore, functional failure to capture may make it even more confounding.
The Autocapture backup pulse is delivered at approximately 80 ms after the initial output. The appearance is that of intermittent loss of capture followed by backup pulses that do capture as long as the myocardium is not refractory. The device times off of these backup pulses, resulting in irregular intervals between captured complexes.
Once a diagnosis of intermittent ventricular undersensing is made, the only possible correct answer of those listed is to correct the fundamental problem by making the ventricular channel more sensitive.











Measured Data		
Ventricular		
 Pulse amplitude 	4.1 V	
 Pulse current 	.2 mA	
 Pulse energy 	0	
 Pulse charge 	0	
 Impedance 	> 3000	
Atrial		
 Pulse amplitude 	3.8V	
Pulse current	9.6 mA	
 Pulse energy 	12	
Pulse charge	4	
Impedance	398	
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Which of the following could explain the abnormality noted?

- 1. Exit block
- 2. Ventricular lead dislodgement
- 3. Loose set screw
- 4. Ventricular oversensing

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Rhythm strip obtained the afternoon after the pacemaker implant. Patient asymptomatic. RNs call pacemaker service... Generic diagnosis?

- 1. Failure to capture
- 2. Failure to output
- 3. Undersensing
- 4. Rate variation



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