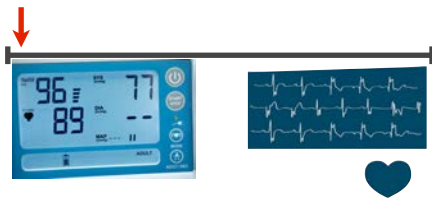# Pacemaker optimization

Rate drop response

Cardioinhibitory syncope

- Vasovagal response
- Carotid sinus hypersensitivity
- Situational reflex syncope
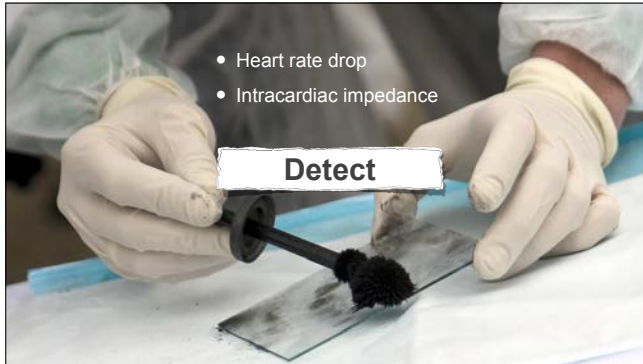

The spectrum

Rate drop response

- Heart rate drop
- Intracardiac impedance

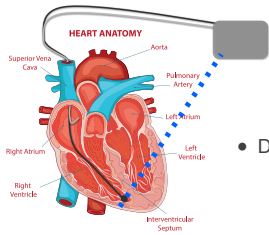**Detect**

Heart rate drop

Sudden decrease in heart rate ✓

In a set time ✓

Below a certain heart rate ✓

Intracardiac impedance

- Decrease in contractility

Intervention
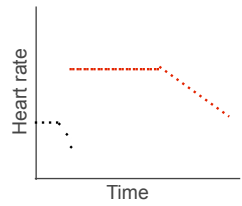
- Increase heart rate
- 100 bpm
- 2 minutes
- Gradual return

Heart rate

Time

Takeaway message

Rate drop response is the feature a pacemaker **must have** if it is being used to treat cardioinhibitory syncope.