

Panic at the AV-node: A case of supraventricular tachycardia mistaken for panic attacks

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Learning Objectives

- Distinguish diagnoses which mimic panic attacks
- Recognize when to reevaluate a previous diagnosis

Case Presentation

66-year-old female with a history of COPD, panic attacks diagnosed 15 years ago is admitted after a panic attack while visiting a family member in the hospital.

- A rapid-response is called for HR > 170

ED Vitals: T 37, HR 80, RR 15, Sat 94% 2L, BP 106/67 Wheezing on exam

Hospital course and workup:

- Labs: TSH 0.5, CBC & CMP unremarkable
- Baseline EKG and Telemetry strips obtained

Additional History

- 3 months of more frequent episodes at home
- Often felt her heart racing and sweating, attributed to panic

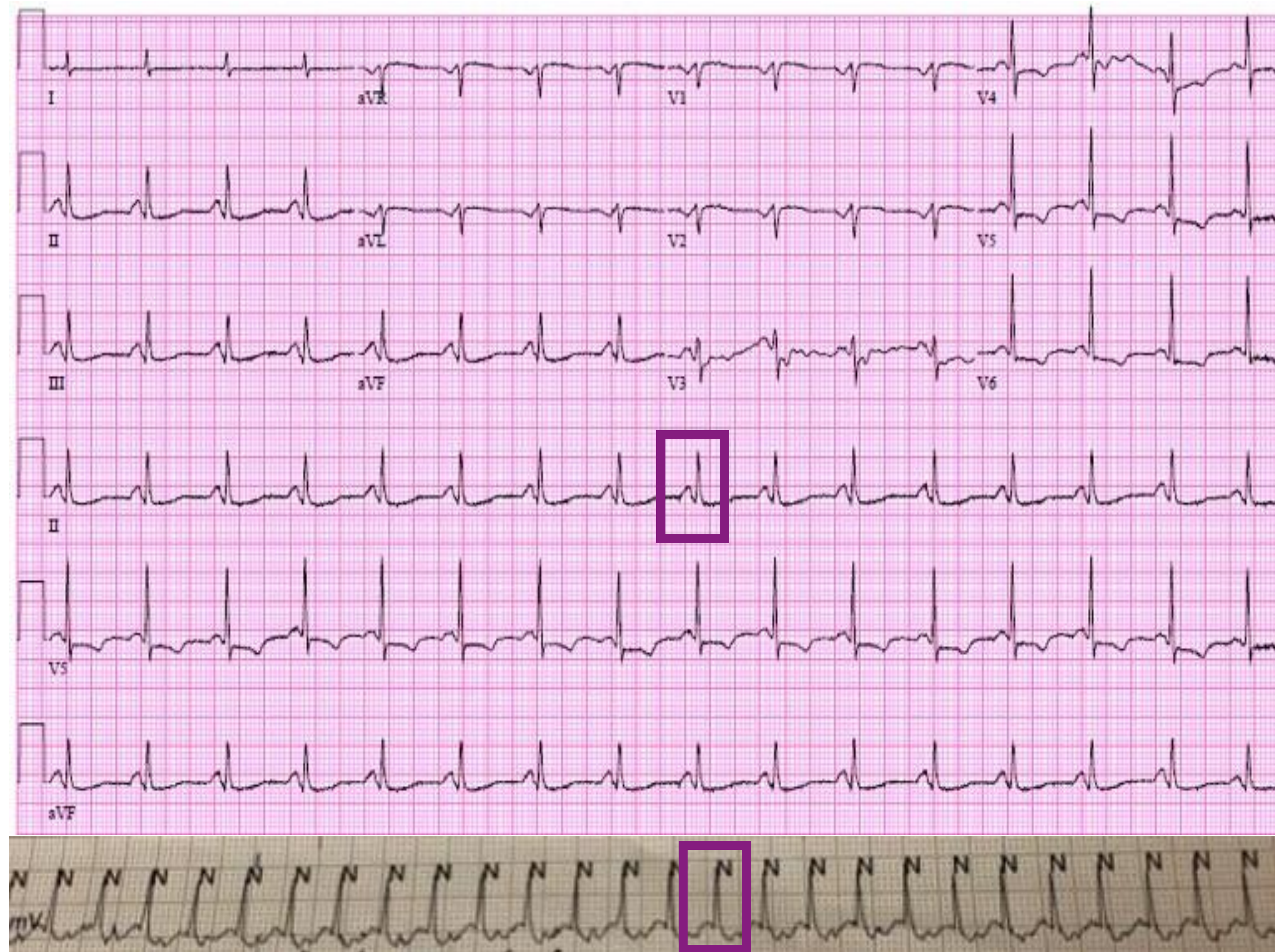


Figure 1. Baseline EKG and Rapid Response Event Telemetry

- The EKG shows regular rate originating above the AV-node with a short PR interval but no delta wave preexcitation
- Telemetry during the rapid response event shows a narrow complex regular tachycardia
- This was concerning for a conduction pathway abnormality and an associated arrhythmia causing her symptoms of "anxiety/panic." The increasing frequency could be related to progressive underlying COPD and hypoxia leading to more frequent arrhythmia events

Panic Attack Differential

- Psychiatric disease
- Hyperthyroidism
- Medication use
- Lung: COPD, ILD, PE
- Heart: Arrhythmia, CHF

Adjusted Diagnosis

Lown-Ganong-Levin (LGL) syndrome is a form of enhanced AV nodal conduction.

- Bundle of James (red path in diagram at right) bypasses the AV node
- Like Wolff-Parkinson-White syndrome: PR interval is less than 120ms
- Difference: No Delta wave, narrow QRS



Case Conclusion

- Started on oral Diltiazem
- SVT frequency decreased
- Electrophysiology recommended ablation
- Her panic attack diagnosis was revised