# Cardea SOLO™ Telehealth Solution Captures Previously Undetected SVT

## Key Takeaways

- Successful telehealth data collection via Heart@Home™ ECG Test Kit
- SVT detected by Cardea SOLO on Day 4
- Patient treatment plan updated and initiated

## Background

A 42-year-old female with a history of physician diagnosed SVT and palpitations contacted the practice for a scheduled annual follow-up visit. Due to COVID-19 exposure risks, a telehealth visit with her cardiologist was planned. During cardiologist telehealth assessment, the patient reported occasional episodes of palpitations and dizziness lasting only a few seconds. Current medications included metoprolol for heart rate control. In 2019, the patient wore a 30-day event monitor that was symptom-activated and limited to one minute of recording time per event. The event monitor was unsuccessful at capturing her SVT.

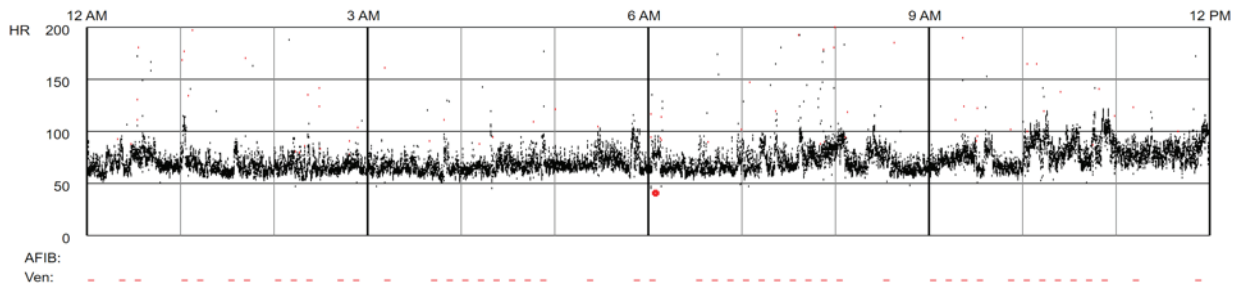
## Diagnostic Work Up

Given patient symptoms and historical episodes of SVT, a Cardea SOLO™ ECG Sensor was prescribed to assess for potential cardiac arrhythmias. The sensor was mailed directly from the practice to the patient's home for self-application.

After 7 days of patient wear time, the Sensor was returned to the practice and analyzed. ECG data from the self-applied Cardea SOLO™ ECG Sensor was found to be 96.8% analyzable by the Cardea SOLO automated Software Analysis System. Significant findings included frequent runs of Tachycardia lasting up to 10 seconds with a maximum rate of 110 bpm. Bradycardic episodes were also documented and confirmed at a lowest heart rate of 38 bpm. A single eight beat run of SVT was noted on Day 4.

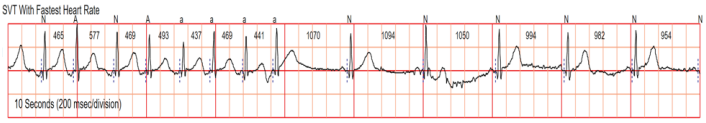
Patient-Reported Events: 1 [SVT]. The patient's diary entry with complaints of dizziness and palpitations corresponded to the single run of SVT.

**Figure 1. Rhythm Signatures™ R-R Scatterplot identifying SVT with Patient-Triggered Marker (red dot) on Day 4**

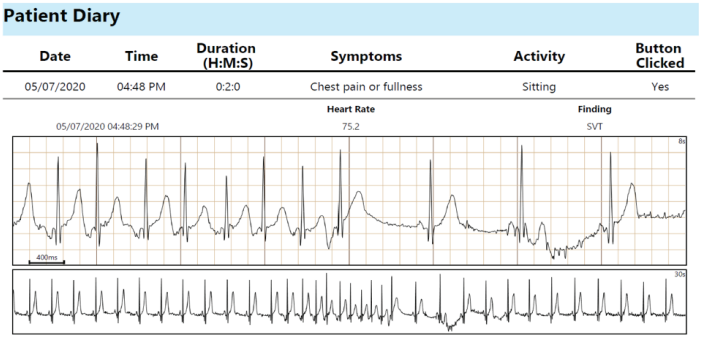


CARDIAC INSIGHT

### FIGURE 2. ONSET SVT




### FIGURE 3. SVT AS REVIEWED IN PATIENT DIARY




## Treatment

The patient's updated treatment plan was initiated upon review and confirmation of Cardea SOLO™ System report findings.

## Discussion

The previous event monitor was worn for thirty days and due to limited recording time, was not successful at capturing the patient's SVT. A standard continuous 48-hour Holter monitor would have missed the single episode of symptomatic SVT findings, which occurred on Day 4 of ECG monitoring. Use of both the Holter ECG and another event monitor would also have required the patient to present to the cardiology office for device application and more extensive patient education.

Use of the Cardea SOLO System provided multiple clinical benefits to both the patient and our practice:

- *Use of remote telehealth consultation avoided unneeded patient and staff exposure risk in the setting of the COVID-19 pandemic.*
- *Use of remote telehealth consultation and the practice's direct-to-patient SOLO Sensor mailing program avoided patient delay in assessment and timely diagnosis.*

The quality of recorded ECG data with patient self-application of Cardea SOLO Sensor was found to be consistent with the quality of in-office sensor application, as measured by "% Analyzable" ECG data and by visual inspection of ECG trace quality.

Cori Pitcher, Certified EKG Technician
Amarillo Heart Group, Amarillo, Texas