CARDIAC INSIGHT

CASE STUDY

Primary Care Practice detects AF with Cardea SOLO Resulting in Seamless Treatment Plan

KEY TAKEAWAYS

- PCP-managed new AF diagnosis on monitored day 6
- Streamlined diagnostic timeline using 99% analyzable data
- Maximized reimbursement with global procedural billing code
- No outsourcing or service center required

BACKGROUND

A 79-year-old female presented for in-office evaluation by her Primary Care Physician (PCP) with complaints of a recent syncopal episode occurring 10 days prior to her visit. She also reported intermittent episodes of palpitations occurring less frequently than every 48 hours. The patient's medical history consists of hyperlipidemia, hypertension and a beta blocker for rate control.

DIAGNOSTIC WORK UP

The PCP performed a physical examination and testing. An in-office 12 lead ECG indicated normal sinus rhythm and no other findings. Due to the reported frequency of symptoms at >48-hour intervals, the PCP elected to forego a traditional Holter ECG monitor and prescribe a 7-day Cardea SOLO™ ECG Sensor.

A Cardea SOLO Sensor was applied to the patient during the initial PCP visit. After 6 days of patient wear time, the Cardea SOLO Sensor was returned to the PCP office by the patient and processed by clinical office staff using PC-based Cardea SOLO Software.

CARDEA SOLO™ ANALYSIS & PHYSICIAN-CONFIRMED FINDINGS

Significant arrythmias were detected by the Cardea SOLO Software over the 6-day patient wear period and confirmed by the PCP. Confirmed findings included 942 episodes of AF with an AF burden of 39.4% (Figure 2). Additional findings included 57 episodes of SVT with the fastest heart rate of 216 beats per minute (Figure 3) and two patient-triggered events identifying symptomatic AF. The Cardea SOLO software also identified two pause episodes lasting over two seconds each (Figure 4).

The patient's one-week follow up appointment to discuss findings was conducted via a telehealth appointment due to pandemic concerns. As the PCP had already prescheduled the patient for cardiology referral, the patient was seen by a cardiologist for further evaluation and treatment within 4 business days of her PCP confirming an AF diagnosis. Confirmed findings on the Cardea SOLO report were made available to the consulting cardiologist for review.

Patient-Reported Events: The patient's diary entry with complaints of slight dizziness while lying in bed corresponded with multiple episodes of AF with heart rates reaching 149 beats per minute. (See Figures 1A and 1B)

FIGURE 1A. AF WITH PATIENT TRIGGERED EVENT NOTATED IN PATIENT DIARY

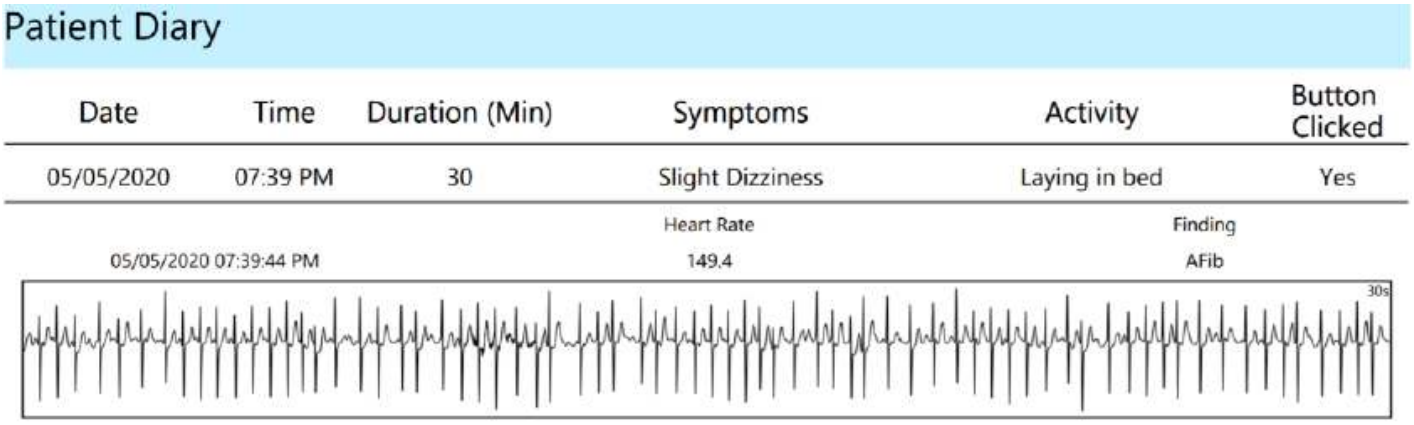


FIGURE 1B. RR SCATTERPLOT VISUALIZING AF EPISODE WITH PATIENT TRIGGERED EVENT

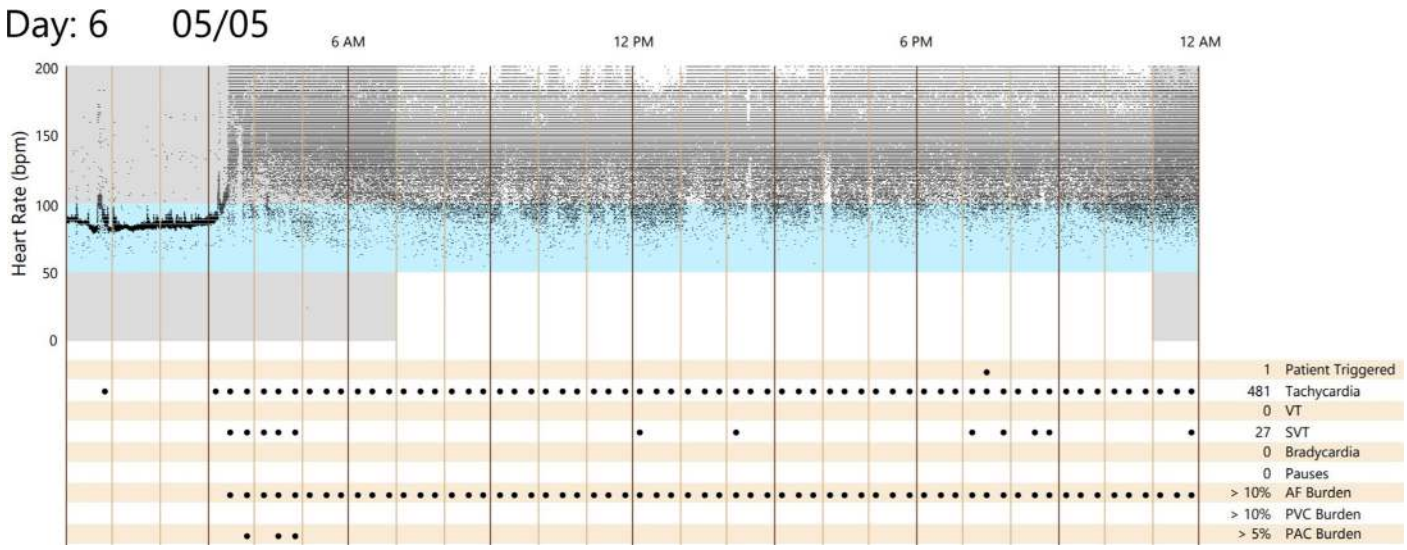


FIGURE 2. LONGEST AF EPISODE

FIGURE 3. SVT WITH FASTEST HEART RATE

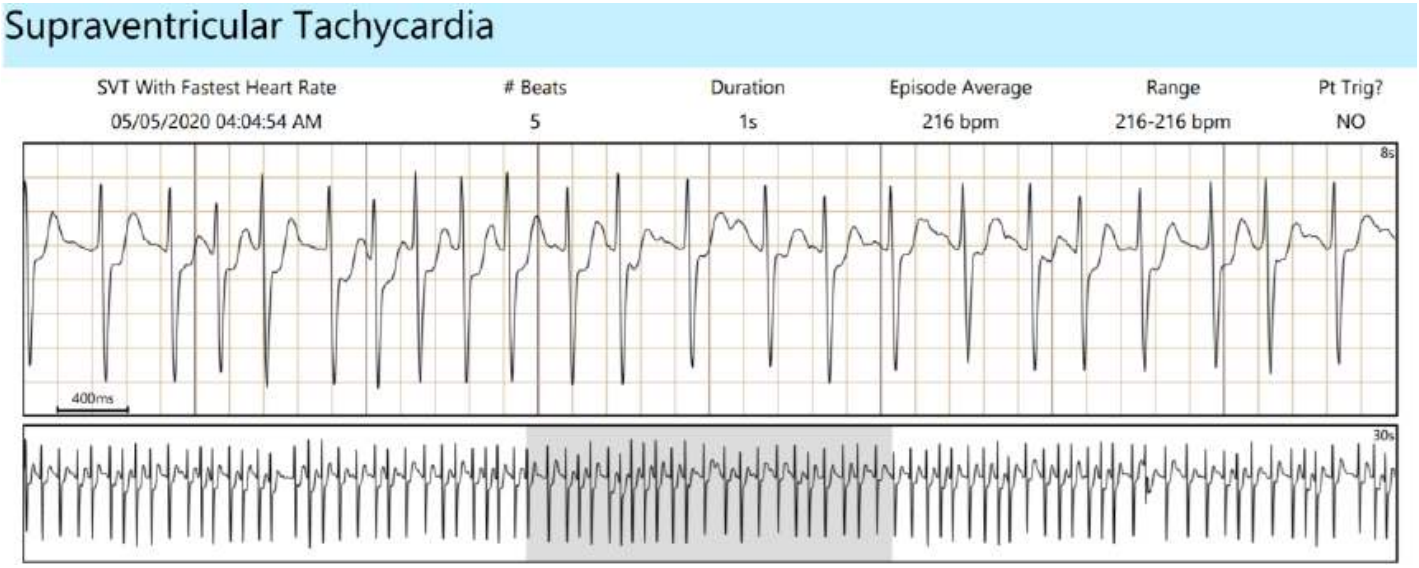
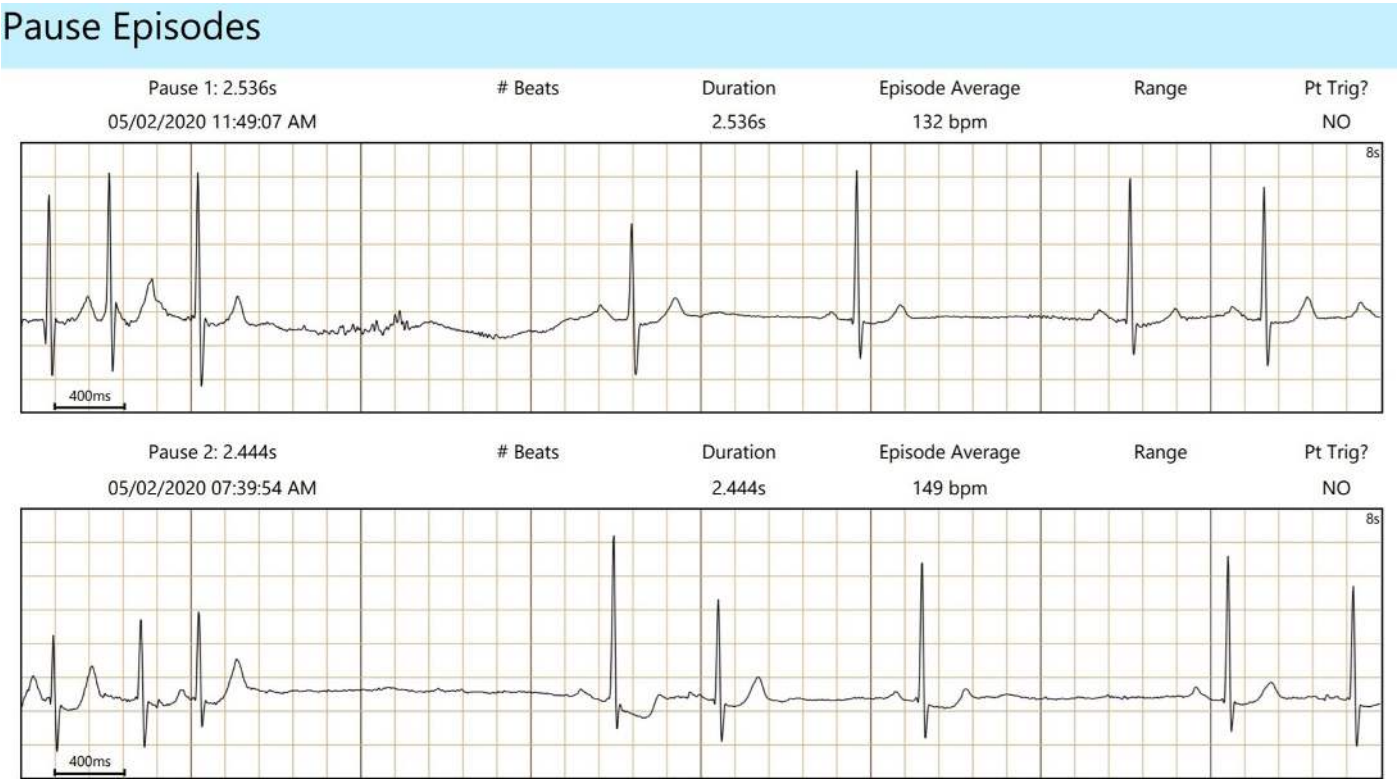


FIGURE 4. PAUSE EPISODES



DISCUSSION

A standard 48-hour Holter monitor can often fail to capture abnormal cardiac events due to its relatively short wear time duration. Based on reported symptom frequency >48 hours, the PCP's selection of a 7-day Cardea SOLO ECG Sensor enabled longer term full-disclosure ECG recording for optimal arrhythmia detection and diagnostic yield.

Initiating a Cardea SOLO test during the PCP visit shortened the patient's overall diagnostic and treatment timeline. Confirmed Cardea SOLO report results were readily available for consulting cardiologist review and action.

Use of a telehealth visit during this process reduced patient and staff risk exposure in the setting of the COVID-19 pandemic. The telehealth visit for follow-up was also reported to positively benefit the patient experience.

Use of the Cardea SOLO Software provided multiple clinical benefits to both the patient and the PCP practice:

- PCP-managed diagnosis of new AF in outpatient setting
- Streamlined cardiologist referral and patient treatment timeline
- No use of outsourced services for long-term ECG device application and analysis required, enabling PCP office global billing and costeffective care

Medcare
San Antonio, Texas

TREATMENT

The patient's AF treatment plan was determined at her cardiologist referral visit.

