



Key Takeaways

- Early detection of Atrial Fibrillation expedited stroke intervention
- In-clinic automated report generation enabled faster diagnosis and treatment

Background

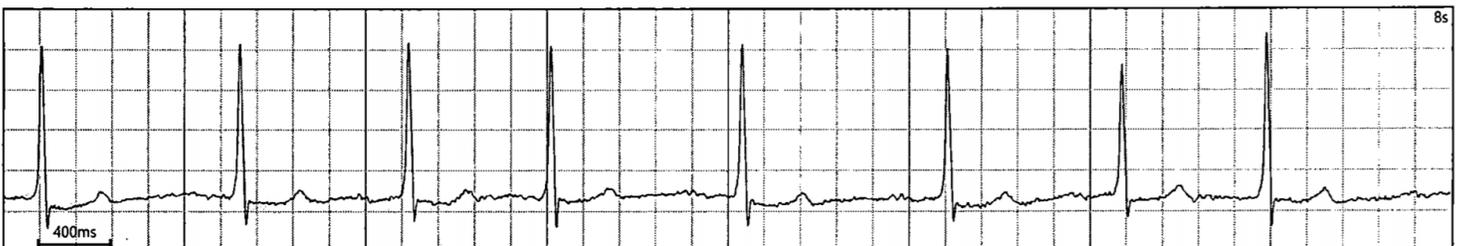
A 43-year-old female with a history of hypertension and unexplained shortness of breath was referred for a Cardiology consult. During the Cardiology assessment, the patient reported dyspnea on exertion and a history of unexplained falls. The patient stated that while climbing stairs and walking at an incline, she became dizzy and unexpectedly short of breath. The patient's symptoms were new in onset and were reported to have become worse in severity over the course of the preceding weeks. Current medications included Lisinopril for hypertension and patient reported a family history of coronary artery disease.

Diagnostic Work-Up

Due to the Cardiologist's concern with the patient's symptoms and history of falling, a Cardea SOLO™ Ambulatory ECG Sensor was prescribed to assess potential cardiac arrhythmias. After 2 days of patient wear time, the SOLO Sensor was returned to the Cardiology office and analyzed in-office with the Cardea SOLO™ automated analysis software. A report was immediately generated and provided to the Cardiologist for over-reading and diagnosis.

Significant findings included 125 episodes of Atrial Fibrillation (AF) with an AF burden of 10.4%. The longest AF episode was recorded for 8 minutes. After reviewing the patient's event diary provided within the Cardea SOLO™ report, the onset of the AF episodes was found to correlate directly with the patient's reported symptoms.

Longest AF Episode 01/19/2021 09:36:34 PM Duration: 8m 13s HR: 56 [53 - 63]





Discussion

Clinical Benefits

Early detection of AF is important for stroke prevention. Without anti-coagulation, a person with AF may be up to five times more likely to have an ischemic stroke than someone without AF¹. AF-related strokes are devastating, with 20% being fatal and 60% being disabling.² Short-term monitoring to assess for cardiac arrhythmias, such as AF, provided an expedited treatment plan for the patient. Upon immediate interpretation of the SOLO findings and automated report after 2 days of wear time, the physician was able to initiate an AF treatment pathway to include anti-coagulation and loop implantation for long term AF monitoring.

Economic Value

Using the Cardea SOLO™ as a tool to support medical necessity to initiate the AF treatment and loop recorder implantation is beneficial for both the patient and the Cardiology practice. The patient can receive the treatment they need sooner while reducing potential risk for stroke. The practice can maneuver through medical necessity and gain the ability to perform the interventional medical procedures needed (in this scenario, an implantable loop recorder).

“We really like Cardiac Insight for all the help and support the company offers but most importantly, the Cardea SOLO Sensors are well-designed and the system’s software algorithm is top notch with its arrhythmia analysis and detection. The ability to apply the sensor in the office and be provided an automated report in minimal time has facilitated early stroke intervention and essentially elevated the level of patient care while also expediting our clinical workflow,” said Gary Cox, Cardiology Technician at Advanced Cardiology & Primary Care LLC in Hackettstown, New Jersey. ***“We no longer have to wait weeks to get a report and feel more comfortable keeping our patient data in-house and avoiding potential data breaches.”***

Cardea SOLO’s automated in-office analysis eliminates the need to outsource the processing of the ECG report. Clinicians can generate a report in-office within minutes of the patient returning and interpret the findings. Not having to wait weeks for an independent processing center to provide the ECG report drives clinical efficiency. The Clinician is able to better facilitate patient care and also streamline the practice workflow.

¹The AHSN Network. The AF Toolkit. <https://aftoolkit.co.uk/> [Date accessed 21 October 2020].

²AF Association. What is Atrial Fibrillation. www.heartrhythmalliance.org/afa/uk/atrial-fibrillation [Date accessed 21 October 2020]