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Patient-reported triggers of paroxysmal atrial fibrillation

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Background

Triggers for discrete atrial fibrillation (AF) events remain poorly studied and incompletely characterized.

Objective

The purpose of this study was to describe common triggers for AF and their relationships with patient characteristics.

Methods

We invited symptomatic, paroxysmal AF patients enrolled in the Health eHeart Study and through the patient-centered advocacy organization StopAFib.org to complete a questionnaire regarding their AF triggers and cardiovascular risk factors.

Results

Of 1295 participants with symptomatic AF, 957 (74%) reported triggers for episodes of AF. In comparison to participants without triggers and after multivariate adjustment, those reporting triggers had a 71% lower odds of congestive heart failure (odds ratio [OR] 0.29; 95% confidence interval [CI] 0.14–0.60; $P = .001$) and a >2-fold greater odds of a family history of AF (OR 2.04; 95% CI 1.21–3.47; $P = .008$). The most commonly reported triggers were alcohol (35%), caffeine (28%), exercise (23%), and lack of sleep (21%). Multivariable models revealed that younger patients, women, and those with an AF family history more commonly experienced various triggers. Patients reported a median of 2 different triggers (interquartile range 1–3). Female sex, Hispanic ethnicity, obstructive sleep apnea, and a family history of AF were each associated with a greater number of AF triggers. Vagally mediated triggers tended to cluster together within individuals.

Conclusion

The majority of patient-reported triggers are modifiable, potentially identifying accessible means to prevent and reduce AF episodes. Exploring the interactions between AF patient type, including underlying genetic differences, and common exposures may be fruitful areas of investigation.

Keywords:

[Alcohol](#), [Atrial fibrillation](#), [Atrial flutter](#), [Caffeine](#), [Triggers](#)

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