

Symptomatic palpitations causing anxiety in women – what are the underlying arrhythmias?

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Conclusion

In the great majority of episodes causing symptomatic palpitations in women, the underlying heart rhythm is benign. However, in 5% of recordings, previously undiagnosed atrial fibrillation or supraventricular tachycardia were found - 19 participants with atrial fibrillation and 12 with supraventricular tachycardia among 918 women during 2 months.

Background

Highly symptomatic palpitations are common, particularly in women, and may cause disturbing symptoms including anxiety, depression, and decreased health related quality of life. Palpitations in this context have been considered generally benign and caused by premature atrial or ventricular beats or stress-induced sinus tachycardia. However, how often arrhythmias of clinical importance such as atrial fibrillation and supraventricular or ventricular tachycardia is the cause is unknown.

Purpose

To evaluate to what extent symptomatic palpitations in women are caused by clinically important arrhythmias.

Method

A new Swedish digital technique (Coala Heart Monitor®) was used. The system uses a well-validated algorithm to analyze heart rhythms (both thumbs and chest recordings). It is connected to the user's smartphone and provides immediate response to the user. The result is simultaneously available for the supervising physician. In cases of non-benign arrhythmias, the result was also analyzed manually.

- 918 women (age 56±11 years) with palpitations causing anxiety were included
- ECG was recorded twice a day and at symptoms for 60 days
- 6 831 ECG recordings were done due to symptomatic palpitation
- At start participants with known atrial fibrillation were excluded

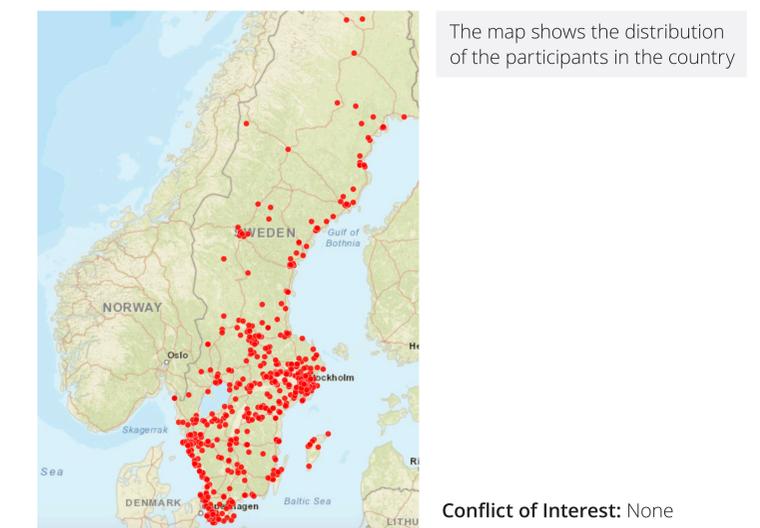
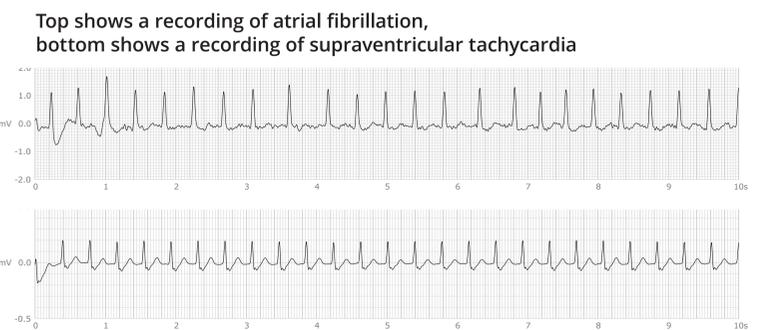
Results

- 6831 ECG recordings during palpitations

Underlying heart rhythm	%
Normal sinus rhythm	73
Sinus tachycardia	12
Premature atrial or ventricular beats	7
Atrial fibrillation	4
Benign sinus bradycardia and second degree AV block type 1	4
Supraventricular tachycardia	1
Ventricular tachycardia	0



- 19 women with previously undiagnosed atrial fibrillation and 12 women with previously undiagnosed supraventricular tachycardia were found, i.e. only 3,4% of the participants had clinically important arrhythmias.
- In 1% of recordings, quality was too poor for analysis.



Conflict of Interest: None