DETECTING SILENT ATRIAL FIBRILLATION FOR SECONDER STROKE PREVENTION WITH ZENICOR ECG (poster)

Jozsef Mandel[1], Christina Petersson[1], Elin Karlsson[1], Yeasmin Tahera[1]
[1] Kullbergska Sjukhuset Medicinkliniken

Background

Cerebrovascular diseases are the third common cause of death within cardiovascular diseases in Sweden. Atrial fibrillation (AF) is a major risk factor of ischaemic stroke. Since AF is often asymptomatic, it seems to be crucial to identify all AF to achieve the best possible secondary prevention.

Aims of project are:

To determine the effectiveness of prolonged intermittent screening for PAF using Zenicor ECG.

To show the cost-effectiveness by calculating the number of saved hospital days in comparison with 72 hours continuous monitoring.

Methods:

Zenicor ECG is a handheld device where the patient can register ECG recordings over a long period of time.

Patients included in the project had a diagnosis of ischaemic stroke, TIA or amaurosis fugax (retinal occlusion). Participants performed recordings twice daily or when they had any suspected heart-related symptoms for a total period of 21 days.

Results:

AF was detected in 14 of the 121 patients (11.6%).

AF was detected 4 out of 56 patients (7.1%) within the stroke subgroup, 8 out of 61 patients (13.1%) within the TIA subgroup and 2 out of 4 patients (50%) within the central retinal occlusion subgroup.

We were able to discharge patients with Zenicor ECG within 24 hours. This way, we were able save 107 hospital days in 66 cases

Conclusions:

The practice of cardiac monitoring varies from institute to institute.

Prolonged intermittent short-term ECG recording performed with Zenicor thumb ECG device seems to be an efficient, readily available simple and cost-effective method, thus we decided to implement the method into the daily practice. Our project confirmed the diagnosis of AF in 11,6% of cases. Each participant with verified AF diagnosis obtained NOAC treatment.

As the prolonged intermittent ECG recording method has proven efficient and cost effective, we are going to continue applying the method at Kullbergska Hospital.