

Diagnosing Atrial Fibrillation in time can save lives

Oulu and Kuusamo are starting a pilot project in the beginning of 2017, where high-risk patients are screened for atrial fibrillation with a home-monitoring ECG-device. The aim is to detect atrial fibrillation earlier and easier with the use of this diagnostic device. Number of patients enrolled to the pilot is 250 in the Oulu and Kuusamo area.

Atrial Fibrillation is the most common long-standing arrhythmia. In a Swedish study around three percent of the population suffers from atrial fibrillation. According to this approximately 135 000 Finns are affected with the arrhythmia. In Finland there are around 14 600 strokes annually, of which nearly one third might be caused by atrial fibrillation.

Quality of life is impaired in the majority of patients with AF. The most typical symptoms are quivering or fluttering heartbeat, weakness and fatigue, faintness or confusion and headaches.

Atrial fibrillation is diagnosed with ECG. And because AF episodes are sporadic, detecting the arrhythmia can be challenging. The main purpose of this pilot is to test whether a home-monitoring device could lead to better and earlier detection of AF in high-risk patients.

"The patients are given a home-monitoring device for a two-week period, which measures ECG via the patients thumbs" says Cardiologist Kari Ylitalo (MD, Head of Electrophysiology Oulu University Hospital), who is one of the leading physicians in this project.

The home-device is easy to use and sends the ECG data automatically to a server to be analyzed. After the two-week period, the patient will be informed if atrial fibrillation has been detected or not. If episodes of atrial fibrillation have been detected, the patient will be directly referred to further examinations.

There are already several new technological innovations for ECG home-monitoring. In this pilot, a Swedish company Zenicor ECG -device has been selected, because it is already in clinical use in Sweden and Finland and it has been validated in several scientific trials.

Dr. Ylitalo and the other leading physician in this project, Dr. Timo Lauri (MD, specialized in cardiology and internal medicine), are pleased that Oulu University Hospital and surrounding areas are included in the pilot. "Atrial fibrillation treatment in the Oulu area is already at a good stage. We are happy to be a part of a pilot, which aims to improve the treatment availability even further." The topic has been researched in Oulu also earlier with an area-targeted anticoagulation study.

Oulu has a long history in atrial fibrillation catheter ablation treatment. This treatment is performed less in Finland in general compared to other Nordic countries, but in Oulu the level is comparable to the general Nordic level. "In 2015 we performed roughly 260 atrial fibrillation ablations per million inhabitants. The respective number for all of Finland is 169 per million inhabitants" Dr. Ylitalo concludes. For example in Denmark the number of AF ablations per million inhabitants is 337.

In a big randomized multi-center study catheter ablation has been proven to stop paroxysmal AF more effectively than drug-treatment and it has a clear improvement in the patient's quality of life. According to Dr. Ylitalo "catheter ablation is a complex procedure and the patients must be selected well and at the right time to be applicable for the procedure. Despite the complication risks, the advantages to the patients are high. In Oulu the primary health care and special health care work well together and the availability of the treatment to the selected patients is at a good level."

The different parties involved in the pilot are: Oulu University Hospital, Oulu Heart Center, Kempele, Liminka, Muhos and Kuusamo primary care centers and Zenicor Medical Systems AB, Biosense Webster and Bayer Oy.

For more information, please contact Oulu Heart Association. Contact details can be found below.

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