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Country: **Mexico**

Titel of the project: **TIMELY DETECTION OF ATRIAL FIBRILLATION FOR THE PREVENTION OF CEREBROVASCULAR DISEASES**

Project details

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Award amount: €100,000

For the past year the Maddona di Guadalupe Foundation has been carrying out cardiology studies on low-income patients, mostly geriatric patients; 20% of Puebla's population is older than 60 years old and 60% do not have health insurance, thus any effort to improve their quality of life must be a priority.

Cerebrovascular diseases are one of the main causes of death in older Mexican adults, with a 2:1 women to men ratio; among the most frequent risk factors of the older adult women in Puebla are the following: arterial hypertension, of which only 18.8% receive effective coverage for their disease; diabetes mellitus, which increased its incidence by 17%; and atrial fibrillation (AF), of which no statistics exist. AF in any of its clinical presentations requires a transthoracic and transesophageal echocardiogram to be carried out mainly for the evaluation of the left atrium and its auricle; it requires specialized software with analysis of tissue type, strain and strain rate spectral for a better study. However, the equipment necessary to carry this out is not available, so part of the resources will be used to acquire an echocardiograph with table in order for these studies to be carried out. Another objective covered by the Maddona di Guadalupe Foundation is ongoing medical education, both higher education and postgraduate studies, that will benefit from these economic resources and the data obtained from the patients, which will serve as a database for research of both the diagnosis and the prognosis and treatment of AF. The active participation of our fellow physicians will be carried out in conjunction with other medical organizations, such as Puebla's medical charitable society and Puebla's society of cardiovascular assistance and rehabilitation, who have always supported our vision. The selected female patients will be invited to be part of this great mission, starting with their medical history and a complete physical examination to divide the subjects into two groups (patients with arterial hypertension, and diabetic and hypertensive patients). The simple transthoracic echocardiogram study, with spectral analysis and three dimensional volume quantification, will then be conducted, selecting those who presented with dilation of the left atrium from both groups for the analysis by 12-channel holter monitoring, to classify the type of AF. Finally, patients with AF will be scheduled a transesophageal echocardiogram in search of thrombus in the left auricular appendage and a spectral analysis of it will be conducted, and with the final report, the patient will seek treatment from his or her attending physician. They will be assessed again in 6 months with transthoracic echocardiogram, and those who presented thrombus with another transesophageal echocardiogram, together with new holter monitoring. The expected health impact will be an increase in the early diagnosis of AF rate, together with a decrease in its complication and mortality, but mainly the teamwork.

Audience

Type

- AF Patients
- Healthcare professionals
- Carers of AF Patients
- General public

Location

Mexico, North America