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CONTRIBUTIONS OF
TRANSTELEPHONIC
ELECTROCARDIOGRAPHY (ECG-TT) IN URBAN
AND RURAL AREAS OF
THE STATE OF MATO
GROSSO IN THE DIAGNOSIS OF ATRIAL FIBRILLATION (FA) AND
PREVENTION OF ISCHEMIC STROKE (AVEI)

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### INTRODUCTION

AF is a common type of cardiac arrhythmia in which the heart rhythm is irregular and rapid, in which the atria "flutter" or "fibrillate", impairing blood pumping and potentially forming emboli. AVEI, on the other hand, occurs when the blood supply to a brain region is totally or partially blocked, causing ischemia in the damaged brain region. Although AF and AVEI appear to be unrelated, science reveals a close relationship between them.

# **OBJECTIVE(S)**

1. General Objective: To verify that the use of ECG-TT in Family Health Units (USF) in Mato Grosso, at urban (Cuiabá) and rural (Cidade de Pedra Preta) level, can mitigate or prevent the severity of ischemic neurological injuries (AVEI).

# 2. Specific Objective:

- 1. To show and verify the use of ECG-TT in patient care at two USFs in Mato Grosso.
- 2. To show the importance of rapid and adequate diagnosis and treatment of AF in preventing the onset and increased severity of AVEIs.

### **METHODS**

# **CLINICAL CARE**

The patient receives clinical care at the USF, with a clinical history (anamnesis) and physical examination, establishing a clinical diagnosis and verifying the need for an electrocardiographic test. If indicated, the test is started by recording the ECG using a cardiophone, which is transmitted to the Telemedicine Center via a conventional telephone, cell phone or public community telephone ("orelhão").

## **RESULTS**

Of the total of 118 individuals who had a clinical indication to undergo ECG-TT, 81 were from Cuiabá-MT and 37 were from the municipality of Pedra Preta-MT. Of this total, 42 individuals had altered tests. In the smaller municipality, altered tests were more common (48.6%), while in the larger city there was a lower incidence of altered tests (29.6%). This may be due to the low level of information and poor provision of health services to residents of the smaller town, leading to a lower demand for care and undervaluation of complaints, and the greater provision of information and health services in the town with the larger population. Of all the patients who had their tests altered, 6 patients (14.2%) had changes in heart rhythm, which could lead to the formation of emboli and later thrombi, resulting in cases of AVEI. Of these patients with altered ECGs, 30 (71.4%) were referred for specialized treatment and 2 were referred for urgent care.

### CONCLUSION

Through this research, we concluded that ECG-TT is a viable method for Family Health Units, acting both in the diagnosis of healthy people, where we can act in primary prevention, and in the secondary prevention of heart disease sequelae, as is the case with AVEI.