ANALYSIS OF THE FREQUENCY OF EMBOLIC CEREBROVASCULAR STROKE IN PATIENTS WITH CHAGAS' DISEASE (Abstract)\*. THESIS. SÃO PAULO, 1996.

GISELA TINONE \*\*

The present study estimates the frequency of probable cardioembolic strokes in a series of Chagas' disease patients seen at the Hospital das Clinicas of the University of São Paulo. This study also investigated the contributing factors related to cerebral thromboembolic complications in these subjects.

One hundred and seventy three consecutive Chagas' disease subjects were included. All patients were classified in four groups on the basis of heart and laboratory findings. Group 1: undetermined. Group 2: electrocardiographic (EKG) changes only. Group 3: EKG changes and mild myocardial dysfunction (ejection fraction interval equal to 0.64 up to 0.41 inclusively). Group 4: EKG changes and severe myocardial dysfunction (ejection lesser than 0.41). Seven patients with possible atherothrombotic stroke were excluded. Among the 166 remaining subjects, there were 80 females and 86 males.

Forty two (25.30%) patients sustained a stroke of possible cardioembolic origin.

The remaining sample as well as the 42 stroke patients were characterized according to their main clinical features. Thereafter, the entire sample (n = 166) was divided according to gender. A comparative analysis including age, the presence of risk factors for atherethrombotic stroke and heart changes was performed in the male (n = 86) and female population (n = 80). The same variables were compared taking into consideration the stroke (n = 42) and the non-stroke (n = 124) population.

The univariate analysis displayed that decreased ventricular ejection fraction, ventricular extrasystole, right bundle and anterosuperior left bundle blocks, atrial fibrillation, electrically inactive areas and gender (males) were statistically associated with stroke. Additionally, Groups 3 and 4 patients displayed similar associations with strokes. Group 3 and 4 frequency were statistically higher than Group 2 whereas no patients from Group 1 sustained a stroke.

The logistic regression analysis showed that atrial fibrillation, right bundle block, electrically inactive areas and male gender are independent variables with predictive power for stroke occurrence. Alternatively, when only the clinical data and ventricular ejection fraction were analyzed, this last variable and gender (male) were predictive for stroke occurrence.

In conclusion, Chagas' disease patients with myocardial dysfunction are at risk for stroke, even those with mild and moderate myocardial compromise. Patients with exclusively EKG changes are also at risk.

 $KEY\ WORDS: Chagas'\ disease, embolic\ cerebrovas cular\ stroke, myocardial\ involvement, predictive\ factors.$ 

\*Análise da frequência de acidentes vasculares cerebrais embólicos em pacientes chagásicos (Resumo). Tese de Doutorado, Faculdade de Medicina da Universidade de São Paulo (Área: Neurologia). Orientador: Milberto Scaff.

<sup>\*\*</sup>Address: Rua Thomé Pontes 168, 04623-050 São Paulo SP, Brasil.