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Date of presentation: 10-6-2018; Hora 11:50 a 12:00. Room; B3  
Session: Cerebrovascular disease, stroke and cognitive dysfunction.

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**UTILITY OF THE CLOCK DRAWING TEST AS COGNITIVE SCREENING IN PATIENTS WITH ARTERIAL HYPERTENSION.**

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**Objective**

1. To compare two cognitive tests, Mini-mental (MMSE) and clock drawing test (CDT), as screening tools for cognitive impairment (CI) in hypertensive patients. 2. To know the prevalence of executive dysfunction in hypertensive patients and its association with different variables (treatment and control, level of education and other cognitive proof).

**Design and method**

A multicentre study (18 centers) that included hypertensive patients (both sexes,  $\geq 18$  years). Patients were divided into 3 groups: treated / controlled BP 140-90 mm Hg (TNC) and untreated (UT). The educational level was recorded. MMSE and CDT tests were administered (cut-off CDT 5 on 7 and MMSE according to age and education)

**Results**

1414 hypertensive patients, average age  $59.7 \pm 13.8$  years, female 62.3%. The mean BP of the sample were: SBP  $143.6 \pm 21.2$  mm Hg, DBP  $83.6 \pm 12.3$  mm Hg. With 7 years of education: 44.5%, between 8 and 12 years: 33% and more than 12 years: 22.4%. The average MMSE score was  $26.7 \pm 3.5$  and the CDT  $5.5 \pm 1.7$ . The prevalence of CI evaluated by the MMSE (24) 29.3% had abnormal CDT. There was no association between the abnormal CDT and the treatment groups (TC, n = 546, 36.2%, TNC / NT, n = 869, 36.5%, p 0.56). There was an inverse association between the level of education and the abnormal CDT ( $\neq 12$  years 20.8%, p 0.000). The CDT correlated positively with the attention proof (Rho  $0.40 \pm 0.03$ , p 0.000) and visuo-construction proof (pentagons) of the MMSE (Rho  $0.45 \pm 0.04$ , p 0.000).

**Conclusions**

The CDT is more useful than MMSE in the cognitive screening of hypertensive patients. 1/3 of hypertensive patients with normal MMSE had abnormal CDT. The CDT was associated inversely with the educational level and positive way with the attention and visual-construction proofs of the MMSE