Transient Global Amnesia: an emotional trigger for a vascular event?

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Transient global amnesia (TGA) is described as a benign neurological condition, defined by a presence of an amnesic period (anterograde amnesia), with duration of no longer than 24h. The pathophysiology and etiology of this form of amnesia are not yet clear in the scientific community. The purpose of the present study is to characterize patients with TGA.

Methods

From January 2004 to February 2018, **51 patients diagnosed with TGA** (from Stroke Unit and Medicine Department) were considered eligible. A comprehensive analysis of the clinical data was performed.

Results

Mean age 63,2±8,8y

Gender

Vascular Risk Factors

45,1% reported an event duration of 2-6 hours. An emotional/psychological stressful life event was reported in **64,7%** of the patients (sexual intercourse, physical effort or valsalva maneuver were also reported). At admission, more than half presented a systolic >140mmHg.

An hyperintense signal in hippocampus (either bilateral or unilateral) was observed in **18%** of the patients. During follow up period [3-6 months], MRI showed no abnormalities.

Neuropsychological Assessment: no significant previous impairment was reported (SMC; IQCODE)

- * **25%** presented impairment in the screening test
- * **26%** presented short term memory impairment
- * **48%** presented verbal initiative impairment
- * **68%** presented slow processing speed
- * **63%** presented sleep disorders (namely secondary insomnia)
- * neuropsychiatric symptoms: **39,6%** depression and **56,3%** anxiety

Discussion and Conclusions

TGA was prevalence in women, with dyslipidemia and HBP as the most frequent vascular risk factors. From the follow up: no abnormalities on control MRI, the neuropsychological profile showed verbal initiative impairment, slow processing speed, sleep disorders (secondary insomnia) and anxiety symptoms.

Vascular risk factors were present, although an ischemic etiology seems to be a faraway possible explanation due to the nonexistent atherosclerotic factor. Changes in immediate memory are observed during the event, but the level of consciousness and the ability to perform other intellectual tasks are maintained. Can it be a vascular response to stress?