

# MIGRAINE PATIENTS HAVING MEMORY RECALL DEFICITS NOT RELATED TO SLEEPING DISORDERS

Aguilar-Torres E.A.1, Sierra-Beltrán M.A.2, Apodaca-Jiménez P.3, Robledo Mercado J.U. 3, Campos-Campechanos F. 3



1 Medical student at Universidad del Valle de México. Escuela de Ciencias de la Salud 2 ITESM lecturer

3 Medical student at Instituto Tecnológico de Estudios Superiores Monterrey. Escuela de Medicina

### **Abstract**

Objective: To present a set of migraine patients with memory recall deficits not related to their sleep disorder.

Materials and methods: Patients who attended a Medical Checkup at Medica Sur Hospital. Anthropometric Measurements were taken, and body rates were calculated. Blood samples for laboratory results were taken for serum glucose and lipids. Memory and attention were assessed with the everyday activity questionnaire and the six items memory attention and concentration test.

Results: 74 patients were included in which 37 presented migraine and 37 that didn't. Deficit attention deficit was present in 8 of the patients that did not have migraine and in 15 of the patients that do present migraines. Deficit in memory was present in 12 of the patients that do not have migraine and in 16 of the patients that do present migraine.

Conclusion: A specific sleeping disorder does not correlate to a memory recall deficit.

## Introduction

Headache is a common neurological problem which can be classified into two major groups, thus primary and secondary. Primary headache disorders include tension-type headache, migraine and cluster headache; while, secondary headaches are associated to other conditions. Medication overuse headache has become a more common condition in patients on medication for a primary headache disorder.

A migraine is a moderate or severe headache, perceived as an exploding or imploding pain. It usually begins at early adulthood. Before 1975, it was Berger's investigation of sleep changes in the electroencephalogram which later inspired Loomis to investigate sleep disorders (SD). Sleep disturbances have taken a central stage in cognitive impairment pathophysiology.

SD are linked to both stress and poor daily activities performance. They are divided in: insomnia, sleep-related breathing disorders, central disorders of hypersomnolence, circadian rhythm sleep-wake disorders, parasomnias, sleep-related movement disorders, and other sleep disorders, according to the international classification.

## **Methods and Materials**

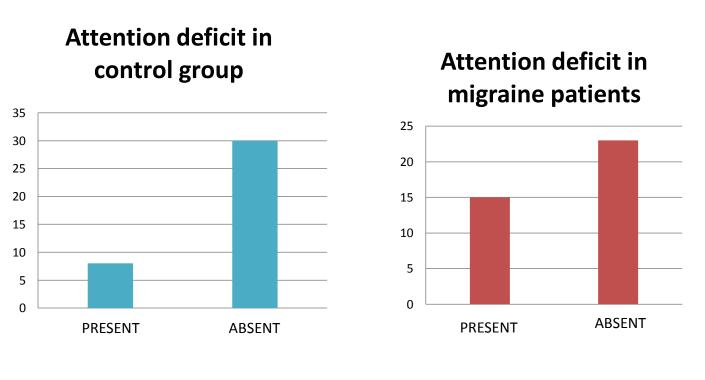
Patients who attended a Yearly Medical Checkup at a private hospital in Mexico City (Medica Sur Hospital). Anthropometric Measurements were taken, and body rates were calculated. Blood samples for laboratory results were taken for serum glucose and serum lipids in order to discard a metabolic syndrome. Memory and attention were assed according to the everyday activity questionnaire and the six items memory attention and concentration test. Statistics calculations were carried out using SPSS Software.

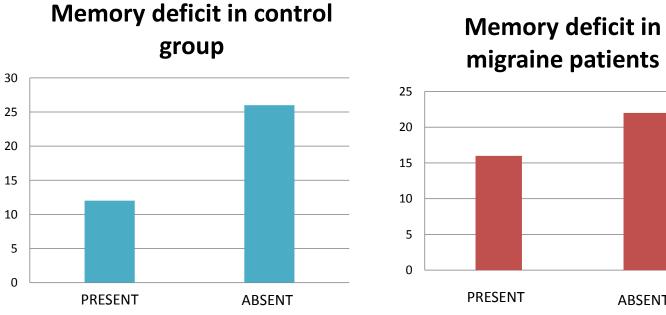
### Results

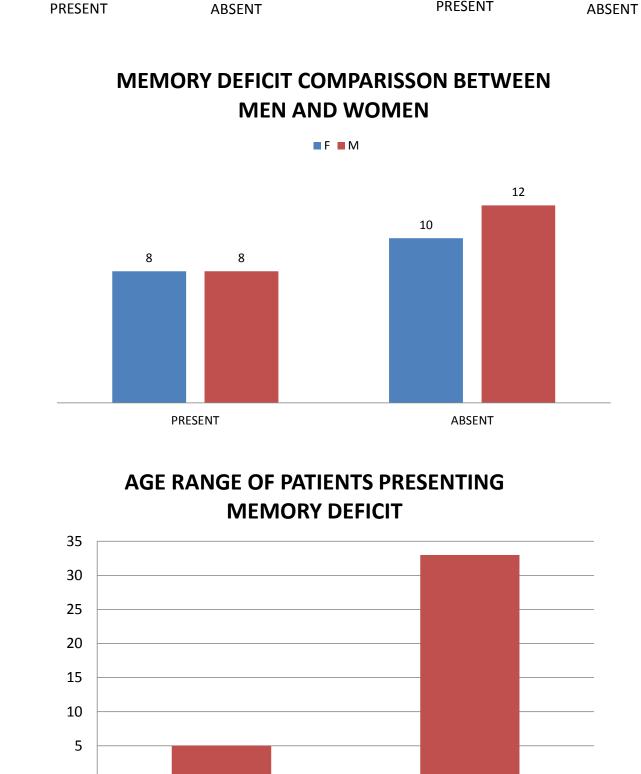
This study was carried out at a private hospital in Mexico City. A total set of seventy-four patients were included, comprising thirty-seven migraine patients (MP), and thirty-seven control patients (CP).

We found that 16 (43.24%) from our MP presented memory deficit. Out of these 16 MP, 14 were shown to have snoring, 10 difficulty on getting sleep, 12 awakenings, and 8 presented apnea. Attention deficit was present in 15 (40.54%) of the MP, 13 were shown to have snoring, 10 difficulty on getting sleep, 11 awakenings, and 11 apneas.

Eight CP had attention deficit, as well as 15 of the MP. In 12 of the CP memory deficit was present, as well as in 16 of the MP.







## Conclusions

≥40

<40

Despite the sleeping disorder that the patient presents it do not correlate to a memory recall deficit. Suggesting there may be other pathophysiological mechanisms involved.

## References