PREVALENCE OF OBSTRUCTIVE SLEEP APNEA SYNDROME IN A POPULATION OF PATIENTS WITH TRANSIENT GLOBAL AMNESIA

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INTRODUCTION. Patients with obstructive sleep apnea syndrome (OSAS) can develop subtle brain damage in area involved in memory processes. Because of the anatomical concordance of cerebral dysfunction occurring in both OSAS and TGA, it would be interesting to evaluate the relationships between the two conditions. Accordingly, the aim of this study was to verify whether the presence of OSAS could predispose subjects to suffer from TGA.

METHODS. Twenty-nine patients who suffered from a TGA episode were included. A case-control model was used matching cases with controls by sex, age and body mass index category. Diagnosis of OSAS was based on the results of the Berlin Questionnaire which was later confirmed by means of an all-night polysomnography recording. Sex, hypertension, and other vascular risk factors (diabetes, smoking and dyslipidemia) were considered as binary variables; age was synthesized as continuous variable and BMI as an ordinal variable. Binary variables were compared with the chi-squared test; continuous variables were compared with the t-test. Data were cross tabulated to obtain odds ratio and relative risk. We analyzed the correlations among variables with the Pearson's bivariate test. Then, we prepared a multivariate binary logistic model adopting OSAS as the dependent variable, grouping variable (TGA patients or controls) as main predictor, and age, sex, BMI and vascular risk factors as covariates. A second multivariate binary logistic model adopted a grouping variable as the dependent variable, OSAS as the main predictor, and age, sex, BMI and vascular risk factors as covariates.

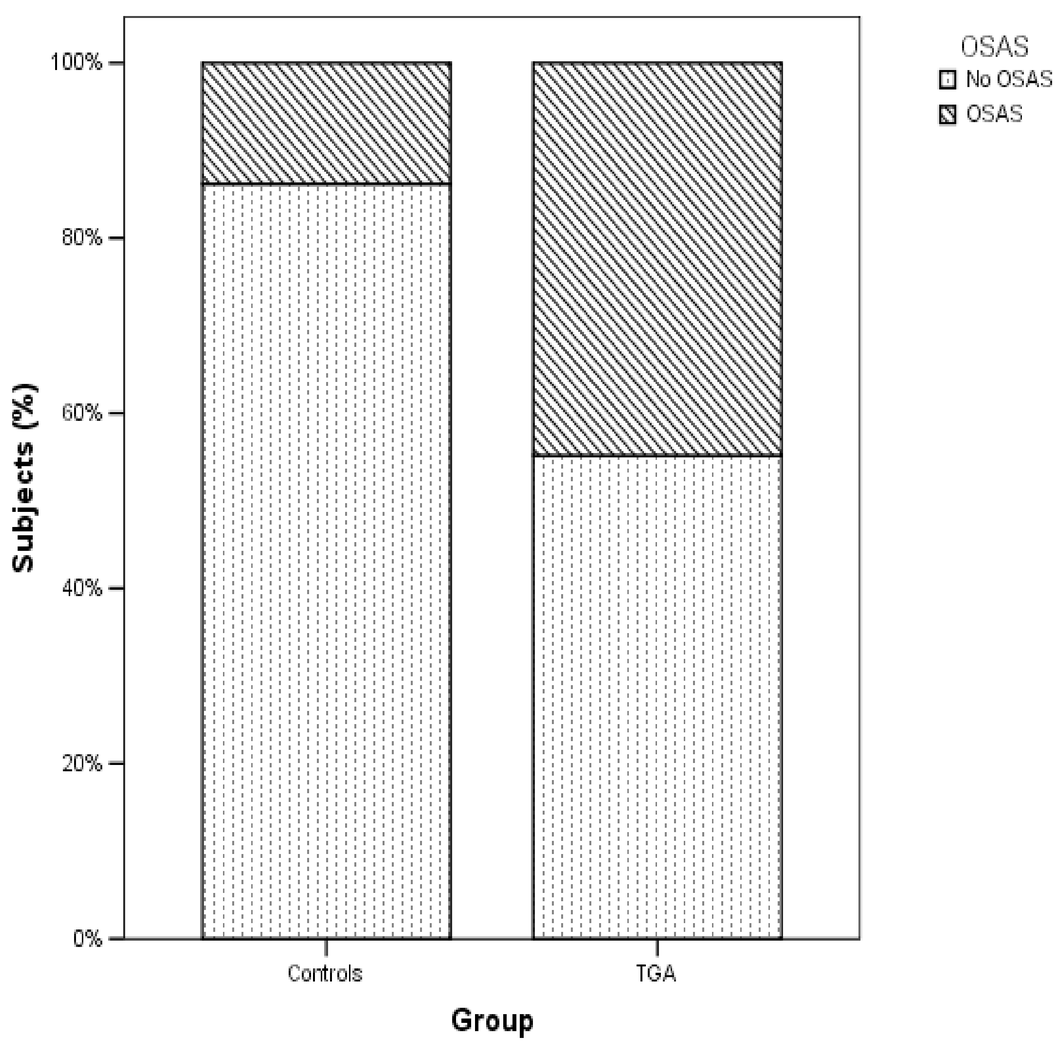
RESULTS. The prevalence of OSAS among TGA patients was significantly higher with respect to controls (44.8% vs. 13.8%, p=0.020 chi-squared test) **[TABLE]**. At logistic regression model, subjects with TGA had an odds ratio of 8.409 (95%CI: 1,674-42,243; p=0,010) of having OSAS when compared to controls **[FIGURE]**.

CONCLUSIONS. According to our findings, an accurate investigation of sleep disturbances should be taken into consideration in each patient after a TGA episode. If our data were confirmed in studies based on wider populations of patients, OSAS could be included among the predisposing factors for TGA. This would have relevant clinical consequences and would reduce the number of probable unnecessary instrumental investigations and also increase the possibility of recognizing a sleep-related breathing disturbance that is often a neglected medical condition. This last aspect deserves careful consideration since unrecognized and consequently untreated OSAS is associated with an impressive number of short- and long-term severe consequences whose potential reversibility mostly depends on a timely and accurate diagnosis.

Baseline characteristics of the sample. Significant differences are marked (*)

Variable	TGA Patients	Controls	p
Males (%)	17 (58.6%)	17 (58.6%)	1.000
Age (± SD)	61.83 (±13.84)	62.03 (±12.99)	0.953
Hypertension (%)	16 (55.2%)	16 (55.2%)	1.000
Dyslipidemia (%)	10 (34.5%)	10 (34.5%)	1.000
Diabetes (%)	5 (17.2%)	4 (13.8%)	1.000
Smoking Attitude (%)	4 (13.8%)	3 (10.3%)	1.000
Obese patients (%) BMI >30.00	14 (48.3%)	14 (48.3%)	1.000
Overweight patients (%) BMI 25.00-29.99	6 (20.7%)	6 (20.7%)	1.000
Normal weight patients (%) BMI 18.50-24.99	9 (31.0%)	9 (31.0%)	1.000
OSAS (%)	13 (44.8%)	4 (13.8%)	0.020 (*)

Prevalence of Obstructive Sleep Apnea Syndrome (OSAS) in patients with Transient Global Amnesia (TGA) and Controls



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