




# ALEXITHYMIA INCREASES THE RISK OF MIGRAINE CHRONIFICATION IN WOMEN WITHOUT DEPRESSION

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**Background.** Alexithymia is a psychological construct, characterized by a deficit in identifying and communicating feelings. Emerging data suggest a role for alexithymia in migraine, within a complex interplay with psychiatric comorbidities. This study was aimed to investigate the relationship between alexithymia and migraine chronification in females.

**Methods.** This was an observational, multicenter study, enrolling female patients with migraine. Each patient underwent a psychological assessment for alexithymia (TAS-20 scale), anxiety and mood comorbidities (STAI-Y1/STAI-Y2, BDI-II) and apathy (Starksteln's Apathy scale, SAS-I). Data on headache frequency, intensity and medication use were recorded.A multivariable logistic regression model was fitted to evaluate the association between alexithymia (TAS-20 score) and the probability of chronic migraine. The model included BDI-II categories, the TAS-20 × BDI-II interaction term, STAI-Y2 and SAS-I score, age and education as covariates.

**Results.** The study included 507 participants. In the overall sample, 384 (75.74%) had episodic migraine, 31 (6.11%) had chronic migraine (CM), 43 (8.48%) CM with medication overuse headache (MOH), and 48 (9.47%) could not be classified (missing data).Alexithymia was identified in 207 patients (40.83%), depression in 206 (40.63%). Both variables had 34 missing observations (6.7%).In the logistic regression analysis performed on complete cases (n= 366), the association between alexithymia and chronic migraine was modified by depression severity. In patients with no or minimal depression, higher TAS-20 scores were associated with a higher probability of chronic migraine. The average marginal effect of TAS-20 was 1.74 percentage points for each one-point increase in TAS-20 among patients with BDI-II score 0–4, and 0.70 percentage points among subjects with BDI-II score 5–9. Conversely, the marginal effect of TAS-20 was not statistically significant among patients with a BDI-II score >10.These findings indicate a significant interaction between alexithymia and depression, with the association between TAS-20 and chronic migraine progressively attenuating as depression severity increases. Multiple imputation analysis on the whole sample confirmed this finding, with a milder modifier effect of depression.

**Conclusions.** These results indicate a role of alexithymia in increasing the risk of migraine chronification in women without clinically relevant depression. Moreover, a modifier effect for depression is suggested.