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MEETING ABSTRACT

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EHMTI-0184. Ictal adiponectin levels are modulated by pain severity and treatment response in episodic migraineurs

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Introduction

Adiponectin (ADP) and leptin (LEP) are adipokines with roles in inflammation.

Aim

To assess ADP and LEP levels before and after acute abortive treatment in episodic migraineurs (EM).

Methods

Peripheral blood specimens were collected from EM participants before and after acute abortive treatment with sumatriptan/naproxen sodium versus placebo.

Results

A total of 34 participants (17 responders, 17 non-responders) were included. In all participants, for every 1 point increase in the HMW:T-ADP ratio, pain severity increased by 4.11 (CI: 0.44, 7.77; $p = 0.028$). In responders ($n = 17$), crude T-ADP levels were reduced at 30 min (11.49 ± 3.7 ; $p = 0.001$), 60 min (11.54 ± 3.2 ; $p = 0.001$) and 120 min (11.39 ± 3.7 ; $p = 0.001$) after treatment as compared to onset (12.47 ± 3.6). In non-responders ($n = 17$), crude T-ADP levels were unchanged after treatment. After adjustments, T-ADP levels remained decreased 30-120 min after treatment in responders; additionally, HMW-ADP, and the HMW:T-ADP ratio were decreased and LMW-ADP and the LMW:T-ADP ratio (coeff 0.04; CI: 0.01, 0.07; $p = 0.043$) were increased 120 min after treatment in responders. In non-responders, the adjusted LMW-ADP (coef -0.45; CI: -0.77, -0.14; $p = 0.005$) and the LMW:T-ADP ratio (coef -0.04; CI: -0.07, -0.01; $p = 0.018$) were decreased at 60 min as well as at 120 min after

treatment. Unadjusted and adjusted LEP levels were not modulated by changes in pain severity or treatment response.

Conclusion

Adiponectin, but not leptin, is associated with pain severity and is modulated by treatment response in episodic migraineurs.

Conflict of interest.

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