HORMONAL INDEX OF WELL-BEING IN WOMEN AFFECTED BY MEDICATION OVERUSE HEADACHE (MOH)

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Background. Chronic migraine is the most disabling form of headache among the ICDH-2. The failure of its treatment is often due to a superimposed medication overuse headache (MOH), a form of secondary headache which has been defined as an interaction between a medication excessively used and a susceptible patient (1).

Purpose. Since migraine is often associated with di-stress, which is highlighted as a trigger factor of migraine attacks but may also appear as reaction to migraine attacks, we have measured possible modifications of the adrenal regulation during the disease.

Methods. We measured Cortisol, DHEAS and Testosterone levels in the saliva of fifteen women affected by MOH and compared to a group of fourteen healthy women. The participants were instructed how to collect saliva samples at home, which was performed twice a day: in the morning and twelve hours later, in the evening. Cortisol to DHEAS ratio and Testosterone to Cortisol ratio were calculated as index of psycho-physical well-being.

We would like to emphasize the difficulty to gather a sufficient number of patients affected by MOH and to study them after an adequate wash-out period following the last assumption of AINS and/or triptans; in any case, once under endocrine evaluation the condition must be painless.

Results and discussion. Salivary cortisol was consistently higher in MOH patients as compared to healthy subjects: this aspect is interesting since experimental data suggest that chronic exposure to high levels of corticosteroids can contribute to produce neurotoxic effects. The increased Cortisol/DHEAS and the reduced Testosterone/Cortisol ratios indicated both a loss of the physiological balance to hypercortisolemia mediated by DHEAS and an imbalance between the anabolic hormone testosterone and the catabolic hormone cortisol in favour of the last one.

Conclusions Further studies are required to elucidate the possible clinical relevance of a dis-regulation of adrenal secretion in patients affected by MOH. However, the present study suggested that MOH is associated with negative index of well-being.