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EHF Invited Speakers

S1

KATP channels

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This abstract was not included as it has been previously published [1].

Reference

[1] Al-Karagholi MAM, Hansen JM, Severinsen J, Jansen-Olesen I, Ashina M. The KATP channel in migraine pathophysiology: a novel therapeutic target for migraine. J Headache Pain. 2017; 18(1):90. doi: 10.1186/s10194-017-0800-8.

S2

The secondary headaches: a *cul de sac* for the headache expert ?

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Background

According to the new ICHD 3 diagnostic criteria a de novo headache occurring with another disorder recognized to be capable of causing it is always diagnosed as secondary. For example, when a new headache occurs for the first time in close temporal relation to trauma or injury to the head and/or neck, it is coded as a *"secondary headache attributed to the trauma or injury"*. However, it may be possible, that this headache phenomenologically appears to be a primary headache. But, when a pre-existing headache with the characteristics of a primary headache disorder becomes chronic or is made significantly worse in close temporal relation to such trauma or injury, both the initial (primary) headache diagnosis and a diagnosis of *"Headache attributed to trauma or injury to the head and/or neck (or one of its types or subtypes)"* should be given. In other words, since headache is very prevalent, it can occur simultaneously with another disorder with and without a causal relation. Primary or secondary headache or both – clinically/scientifically spoken a dead end? These entities are a challenging diagnostic problem as can be primary or secondary and the etiologies for secondary cases differ depending on the headache type. Secondary headache can be definitely diagnosed only when solid evidence exists from published scientific studies that the disorder is capable of causing headache. Scientific evidence can come from large clinical studies observing close temporal relationships between the disorder and headache outcomes after treatment of the disorder, or from smaller studies using advanced scanning methods, blood tests or other paraclinical tests.

Conclusion

As all secondary headache disorders can be associated with a wide range of underlying etiologies such as infection, anatomical abnormalities, trauma, and immunological disease or sleep disorders, it is possible that these underlying pathophysiological processes generate long-standing activation of nociceptive mechanisms involved in headache. These can lead to chronification and refractoriness of the headache symptomatology.

References

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S3

Hormonal contraceptives: how they impact on migraine course

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The role of female hormones in the pathogenesis of migraine is well-recognized [1,2]. Migraine is more prevalent in women than in men, it usually starts after puberty and in many women improves during pregnancy and after the menopause [1,3,4]. The menstrual phase of the female cycle represents a trigger for migraine attacks in many women [1,4]. Additionally, exogenous hormones may change the course of migraine by inducing de novo migraine, inducing de novo aura, worsening previous migraine but also improving migraine particularly those attacks related to menstruation [5,6]. Several attempts were made to manipulate the female hormonal cycle to try to improve migraine. A working group including headache experts, gynaecologists, stroke experts, and epidemiologists developed a first consensus document about the safety of hormonal contraceptives in female migraineurs of reproductive age [7]. Currently, no formal guidelines specifically address hormonal treatment of migraine. A further consensus document was developed by representatives of the European Headache Federation and the European Society of Hormonal Contraceptives and Reproductive Health. The aim of this consensus document is to provide recommendations on the management of migraine with the use of estrogens and progestogens in women of reproductive age. We systematically reviewed data about the effect of exogenous estrogens and progestogens on the course of migraine during reproductive age. Thereafter a consensus procedure among international experts was undertaken to develop statements

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P198

Aortic pulse wave velocity in children with migraine: a case-control study

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Background: Migraine has been associated with increased risk of cardiovascular (CV) accident like angina and myocardial infarction(1) . Vascular changes in migraineur traditionally may prevail in cranial blood district, but more likely it is a generalized vascular phenomenon.(2) Previous studies showed an increased aortic pulse wave velocity (aPWV), a direct measure of aortic stiffness and an independent predictor of stroke and CV disease, in young and middle-aged migraineurs(3) Here we hypothesized that, if associated with the pathogenetic bases of the disease, increased aPWV should be appreciable also in migraineurs children.
Materials and Methods: : We studied 10 children with migraine without aura (age 12,9±1,9 years, 7 male and 3 female, blood pressure 123,30±13,6mm Hg) and 6 age-, sex-, and blood pressure–matched healthy control children. In all participants, aortic PWV and aortic augmentation index were measured using an oscillometric technique.
Results: Children with migraine without aura had a higher a PWV (5.65 ± 0.60 vs 4.65 ± 0.42 m×s−1, $p < 0.002$) and aortic augmentation (15.07 ± 13.97 vs 3.00 ± 7,48 $p < 0.037$) than matched control children. While other variables potentially able to influence aortic distensibility, such as mean brachial arterial pressure and age, are not significantly different between the two groups. Similarly, no significant differences emerged as regards heart rate, diastolic arterial pressure and humeral differential and systolic and aortic pulsation..
Conclusion: The present study showed higher aPWV in children affected by migraine without aura with respect to healthy controls. This result support the data of higher aPWV in migraine(3) and suggest that an increased aortic stiffness is already present in childhood. So, whatever the role played by such vascular alteration, it's likely to be associated with basic mechanisms of migraine and could represent a new way to shed light on the complex yet unsolved pathophysiological network of the disease.

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P199

Efficacy of KUZIK®in the prophylaxis of migraine without aura: a case report

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Background
A migraine without aura is the most common type of migraine headache (about 60% to 80% of all migraines). In recent years there is growing interest in the use of nutraceuticals for the prevention of migraine, as there are no specific drugs for this indication. A new kudzu based food supplement (Kuzik) , thanks to its mechanism of action, has attracted our interest in this use.
Materials and Methods
25 year old woman. Familial family history of headache (paternal line). Onset of school age. Gradual increase after the menarche. Diagnosis according to the criteria ICHD-III beta-version: migraine without aura.Frequency: 4 crisis / month. VAS (Visual Analogue Scale): 7. Duration of the crisis: 24-72 hours. Disabling crisis on the first day of the menstrual cycle. Triggering factors: menstruation, ovulation, psychophysical stress. drugs used as needed: fans with partial benefit. No preventive therapies.Total days / month with migraine: 10. Total number of symptomatic administrations:12. The patient performed complementary therapy with Kuzik 2 tablets in the morning on a fast.
Results
Kuzik was well tolerated: on a numerical scale from 1 to 10 the average score was 8 (range 6 -10); patient compliance was optimal, no side effects related to the product were reported, and no weight gain occurred in the patient. As far as efficacy is concerned, at the end of the treatment all the parameters analyzed were significantly improved: the average number of seizures was 2 (range 0-4), days with headache 4 (range 0-12) and medium VAS 3 (range 0-7).It should be noted that there was no disabling crisis at the beginning of menstruation and that there was a reduction, above all, of the intensity of the crises, associated with frequency and duration.
Conclusions
Our study has clearly demonstrated the benefits, safety, and good tolerability of Kuzik in the prophylaxis of migraine without aura and the use of this medication should be taken in consideration as a good practice in this setting of patients. Data from our study are encouraging to be confirmed by further investigations.

Consent for publication: Informed consent was obtained from the patient for publication.

References

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P200

Anxiety, depression and alexithymia in young migraine patients: which relationship with body weight?

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Background A growing body of literature explored the relationship between migraine and body weight. While several studies analyzed common pathophysiological mechanisms implicated in migraine and feeding regulation, data on the role of psychological factors are sparse, especially in pediatric age. Aims of the present study were to study 1) the prevalence of overweight in migraineurs children/adolescents; 2) the possible relationship between frequency of migraine and overweight; 3) the role of psychological symptoms (anxiety/depression) and emotional processing /regulating (alexithymia) on Body mass Index (BMI) in migraine patients.