

MEETING ABSTRACTS

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AL01

Estimating the Probability of Reported Versus Theoretical Drug-Drug Interactions in Headaches Medicine

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Background: This project aims to compare the likelihood of a theoretical drug-drug interaction between a number of abortives and preventives using DrugBank's application programming interface (API) versus the empirically reported interactions using the FDA's Adverse Event Reporting System (FAERS) API.

Methods: We included, as input, abortive and preventive drugs from the *AHS Position Statement on Integrating New Migraine Treatments into Clinical Practice*, as well as *Szperka's, Migraine Care in the Era of COVID-19*. All combinations of up to 3 abortives and/or preventives are screened for interactions through DrugBank and FAERS. If at least one interaction, of any type, is listed, then it is included here and compared across the two databases.

Results: We included 38 abortives and 23 preventives. We downloaded DrugBank data on August 26, 2020 and included FAERS data from October 2012 to March 2020. Table 1 contains the number of interactions for a given number of medications. Due to hardware limitations, 3 abortives vs. 3 preventives was not analyzed.

Conclusion: The likelihood of an interaction increases as the number of combinations of abortives and preventives increases. Per DrugBank, the chance of an interaction is >99% once more than 3 drugs are used in combination. Whereas, the reported interaction is actually less, 60%, per FAERS. This data may help providers to use more rational polypharmacy.

DrugBank: # of Interactions				FAERS: # of Interactions					
Abortives	Preventives	1	2	3	Abortives	Preventives	1	2	3
1	628	9146	66994		1	151	3725	39584	
2	15350	177289	1244829		2	6392	103891	915594	
3	193185	2134216	*		3	115799	1574622	*	
# of Possible Combinations									
Abortives	Preventives	1	2	3	Abortives	Preventives	1	2	3
1	874	9614	67298		1	874	9614	67298	
2	16169	177859	1245013		2	16169	177859	1245013	
3	194028	2134308	*		3	194028	2134308	*	
Probability of Interaction									
Abortives	Preventives	1	2	3	Abortives	Preventives	1	2	3
1	0.7185354	0.9513209	0.9954827		1	0.1727688	0.3874557	0.5881898	
2	0.9493475	0.9967952	0.9998522		2	0.3953243	0.5841200	0.7354091	
3	0.9956552	0.9999568	*		3	0.5968159	0.7377669	*	

Table 1 (abstract AL01). See text for description

AL02

An AI-enabled ECG Algorithm Predicts Higher Subclinical Atrial Fibrillation Risk in Patients with Migraine with Aura Compared to Migraine without Aura

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Objective: Migraine with aura (MwA) is associated with a 2-fold risk of ischemic stroke. Higher incidence of atrial fibrillation (AF) has been



P0371**The influence of coping-strategies and anxiety on clinical course of migraine**

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Objective: To study the association of pain coping strategies (CS) and anxiety levels of patients with clinical course of migraine.

Patients and methods: 130 migraine patients of the tertiary headache center aged 18-56 and 15 healthy controls of matching age were included in open-label cross-section study. 100-point VAS, Vanderbielt's CS Questionnaire, Spielberger's and Beck's Inventories, MIDAS, M-ACT questionnaire, Migraine-specific QoL questionnaire QVM, Gotheborg QoL Inventory (GQI) were used. Statistical analysis of the data was performed with STATISTICA software.

Results: Migraine patients chose passive CS more frequently than controls ($p=0,000$). Passive CS of patients significantly correlated with attacks' duration ($R=0,221$, $p=0,028$), pain intensity ($R=0,222$, $p=0,027$), treatment efficacy ($R=-0,250$, $p=0,019$), MIDAS score ($R=0,312$, $p=0,002$). The choice of passive coping-strategies significantly ($p=0,003-0,000$) correlated with poor QoL according to both QoL questionnaires. The Me scores of trait anxiety in migraine patients were elevated (42,00; CI 41,12-44,38) compared with controls (38,00 (CI 32,97-42,62), $p=0,046$). Trait anxiety scores positively correlated with MIDAS score ($R=0,312$; $p=0,0006$) and analgesics intake ($R=0,203$; $p=0,026$), and negatively – with the efficiency of analgesia depending on M-ACT questionnaire ($R=-0,264$; $p=0,005$).

Conclusion: Coping strategies of patients and anxiety scores significantly correlate with clinical course of migraine.

P0372**Caffeine Use, Migraine Symptoms, and Comorbidities in Migraine Patients at a University Headache Clinic**

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Background:

Most people worldwide consume at least some caffeine. Caffeine can be both a headache trigger and a pain reliever. We examined whether caffeine consumption has a clearly defined relationship to migraine symptoms and comorbidity in our patient population, in a region famous for coffee consumption.

Methods: All new patients referred to the Headache Clinic at the University of Washington complete a detailed patient intake questionnaire that includes questions regarding caffeine use, headache characteristics, sleep, depression, anxiety, and stress. These were analyzed along with headache diagnosis.

Results: Of 5677 unique patients with migraine, 74 % of these had chronic migraine. Caffeine use was identified in 82% of patients. 70% consumed one or less serving of caffeine per day, while 4% consumed three or more. In chronic migraine, higher caffeine use correlates with increased number of headache days per month. We found no correlation of caffeine use and any migraine comorbidities such as difficulty with sleep, perception of stress and depression measures.

Conclusions: Most of our patients with migraine consume caffeine. We found a correlation with headache days in chronic, but not episodic migraine patients, and no correlation with comorbidities in any patients, which was surprising. These findings may mean that caffeine consumption is not a significant migraine trigger, or else that patients limit their caffeine consumption to avoid this.

P0373**Alexithymia and psychological distress in chronic migraine and fibromyalgia: A comparative study**

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Background and objective: Alexithymia is a personality trait characterized by the inability to identify and express emotions. Several studies evidenced a positive association between alexithymia and psychological distress in patients with chronic migraine (CM) and fibromyalgia (FM). Here we evaluated the prevalence of alexithymia and distress in FM and CM, compared to healthy controls (HC).

Methods: Two-hundred and fifty women with CM (age: 46.1±11.5, disease duration: 7.9±7.3 yrs) and 250 FM (age: 51.2±10.5, disease duration: 7.9±7.8 yrs) were assessed by the Toronto Alexithymia Scale (TAS-20), and the Hospital Anxiety and Depression Scale (HADS). A HC group (n=280; age: 51.8±9.0) was also enrolled and assessed by TAS-20 and HADS.

Results: FM had significantly higher levels of alexithymia ($p < .001$) and psychological distress ($p < .001$) than CM and HC. CM patients reported higher levels compared to HC group in the total score ($p < .001$) and in the Difficulty Identifying Feeling subscale of the TAS-20 ($p < .001$). A moderation analysis was performed to examine the moderation effect of the group (CM vs. FM) on the relationship between alexithymia and psychological distress. Besides a strong relationship between alexithymia and distress, the group variable was not a significant moderator.

Conclusions: These findings suggest a common psychological dysregulation in patients suffering from CM and FM, which manifests into a different expression of the physical symptom.

P0374**Associations between physical activity, quality of life and headache in people with Idiopathic Intracranial Hypertension**

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Background and objective: Physical activity is reduced in people with headache conditions such as migraine, this has not been explored in people with Idiopathic Intracranial Hypertension (pwIIH). This survey aimed to quantify physical activity and explore relationships between physical activity, health related quality of life (HRQoL), headache impact and other clinical characteristics in pwIIH.

Methods: An online questionnaire via IiH UK. Primary measures were physical activity (PASIPD) and HRQoL(SF-36®) with secondary outcome measures of headache impact (HIT-6™), Body Mass Index (BMI) and age.

Results: 164 pwIIH completed the questionnaire. PASIPD measures showed that pwIIH have low levels of physical activity (10.38 (IQR ± 17.6) MET hr/day) and a low level of engagement with exercise and muscle strengthening programmes, similar to people with physical disabilities and other headache disorders. Significant moderate correlations were found between PASIPD total score, headache