



ANNUAL **60**th SCIENTIFIC MEETING

Allodynia in Menstrually Related Migraine

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Allodynia in Menstrually Related Migraine 3

Conflict of interest: Speaker of Allergan

RESULTS

7

600 women w/ headaches complaints were met (March 2013 to July 2014) in outpatients or private practice

55 selected

32 completed

33 excluded

By withdrawal, missing location, failure to fill out tool properly

Mean of age: 27.3 (6.79) years

Mean of BMI: 22.1 (2.8)

Mean of menarche age: 12.4 (1.01) years

Mean of "migraine history": 11.5 (6.5) years

Demographics on next table



Demographics

8

Age of participants	Education	Status	
17-25	14 (43.7%) Complete medium	7 (21.9%) Married	11 (34.4%)
27-30	8 (25%) Incomplete medium	3 (9.4%) Divorced	1 (3.1%)
31-34	6 (18.8%) Complete higher	13 (40.6%) Single	20 (62.5%)
38-44	4 (12.5%) Incomplete higher	9 (28.1%)	32
BMI	Ethnicity	Contraceptives	
Low weight	3 (9.4%) White	31 (96.9%) No	10 (31.3%)
Ideal weight	24 (75%) Afrodescendant	1 (3.1%) Yes	22 (68.8%)
Overweight	5 (15.6%)		



Allodynia Assessment – Score of allodynia -

absent (0-2), mild (3-5), moderate (6-8) and severe (9-15) in women in a menstrual pain crisis (MM+) and non-menstrual crisis (MM-), after 1, 2, 4 and 24 hours from the onset of pain attack

9

ALLODYNIA	MM+	MM-	MM+		MM-		MM+	MM-
			1h	2h	4h	24h		
Absent (0-2)	12 (37.5%)	14 (43.75%)	14 (43.75%)	18 (56.25%)	17 (53.13%)	20 (62.5%)	27 (84.4%)	28 (87.5%)
Mild (3-5)	4 (12.5%)	8 (25%)	3 (9.4%)	5 (15.6%)	3 (9.4%)	5 (15.6%)	4 (12.5%)	2 (6.25%)
Moderate (6-8)	5 (15.6%)	7 (21.9%)	4 (12.5%)	3 (9.4%)	3 (9.4%)	3 (9.4%)	0	0
Severe (9-15)	11 (34.4%)	3 (9.4%)	11 (34.4%)	6 (18.75%)	9 (28.13%)	4 (12.5%)	1 (3.13%)	2 (6.25%)

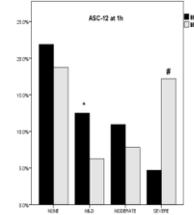


Allodynia – 1 h

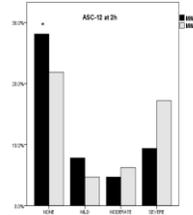
Higher proportion of patients reporting ASC-12 categories "None" or "Mild", in non-menstrual pain crises and higher proportion of patients "Severe" after 1h from onset of pain attack in MM+

Allodynia – 2 hs

Higher proportion of patients reporting ASC-12 categories "None" in non-menstrual pain crises and higher proportion of patients "Severe" after 2h from the onset of pain attack in MM+



Pearson's χ^2 categorical analyses showed significant associations between ASC-12 categories and conditions of migraine attacks (MM+ and MM-)



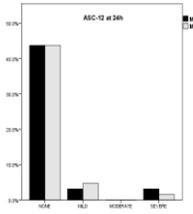
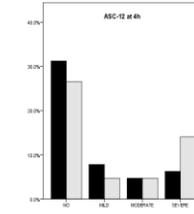
$\chi^2 (8) = 55.7, p < 0.001$; Adjusted residual = 2.0; * Adjusted residual = 2.6 $\chi^2 (8) = 51.4, p < 0.001$; Adjusted residual = 2.4

Allodynia – 4 hs

Higher proportion of patients reporting ASC-12 categories "None" or "Mild", in non-menstrual crises and severe in MM+

Allodynia – 24 hs

No differences for both groups



$\chi^2 (8) = 21.4, p < 0.01$

Discussion

Multicenter trial demonstrated that the clinical characteristics of MRM, are similar to non MRM with regard to their association with allodynia (and others symptoms: aura, photophobia, phonophobia, nausea, level of pain intensity)¹

In the menstrually related migraine group, the number of patients with premonitory symptoms was higher - allodynia developed more frequently during the attack in this group²

Menstrually related migraine has been reported to be more frequent than non-menstrual migraine in patients who develop cutaneous allodynia during migraine attacks³

1. Merle L, Diament et al. *Headache* 2008;48:248-256.
 2. Bhatnagar et al. *Acta Neurol Scand* 2011;125:471-476.
 3. Bhatnagar et al. *Clin J Pain* 2016;32(7):631-639

Conclusions

16

There was a significant effect of the covariate years living with migraine

Higher age of menarche and longer migraine history lead to higher allodynia scores in menstrual related headache attacks

But there were no effect of BMI or contraceptive use at allodynia score in both groups (MM+ and MM-)



THANK YOU !!
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Learning objectives: Upon completion, participants will be able

17

1- to evaluate the allodynia score in women

2- to discuss about allodynia in women

3- to select another population to study allodynia

4- to compare allodynia score in other situations

5- to propose further studies about other variables that influence allodynia in women