

Menstrual Migraine and Associated Pain Onset, Intensity and Interference: Results from Migraine in America Symptoms and Treatment (MAST) Study

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This study was supported and funded by the Dr. Reddy's Laboratories group of companies, Princeton, NJ.

Objective

- Groups based on relation of headache to menses – Pure Menstrual Migraine (PMM), Menstrual Related Migraine (MRM) and Non-Menstrual Related Migraine (NMRM)
- Examined relationships of migraine group to time to peak headache pain intensity, functional impairment and pain interference in large systematic sample of women with migraine

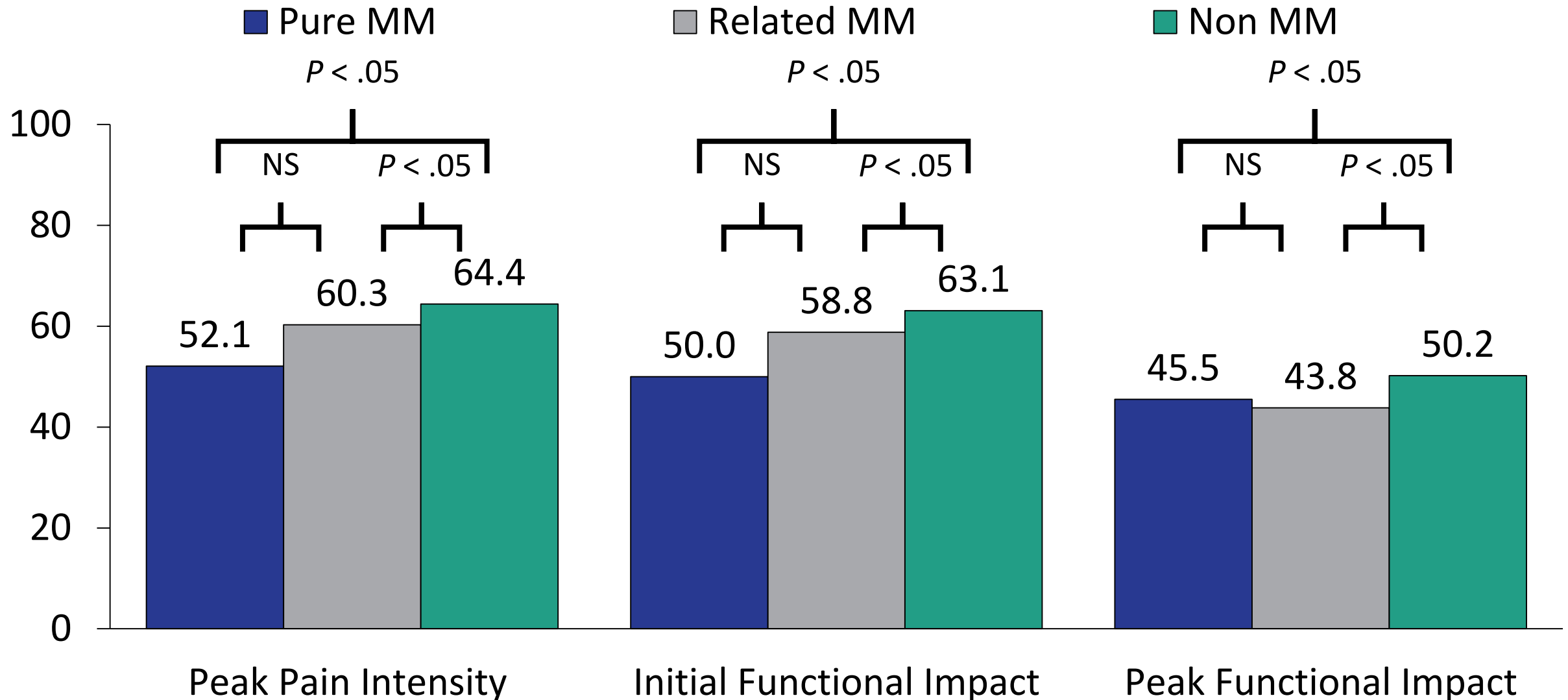
Methods

- Assessed 1) time to peak headache pain intensity 2) time to initial functional impairment and 3) time to peak functional impairment dichotomizing onset times into rapid (≤ 60 mins) and slow (> 60 mins)

Results

- 73 women (2.6%) met criteria for PMM, 817 (28.8%) for MRM and 1,943 (68.6%) for NMRM
- Within 1 hour of attack onset – Headache pain reached peak intensity (62.9%), initial impact on functioning (54.2%), and peak functional impact (44.6%)
- NMRM more likely to reach peak pain intensity within 60 mins (64.4%) compared to MRM (60.3%; $P = .044$) and PMM (52.1%; $P = .031$)
- PROMIS-derived pain interference was lower among PMM women (standardized score 52.9) vs MRM (57.1) and NMRM (56.0) ($F=12.4$, $P < .001$; all post hoc comparisons were significant $P < .01$).

Proportion of Women with Migraine Affected Within One Hour by Menstrual Migraine Subgroup



Distribution of Time to Peak Intensity, Initial Functional Impact and Peak Impact of Headache

Time for Headache to Reach Peak Pain Intensity (%)	... Initial Functional Impact (%)	... Peak Functional Impact (%)
15 Minutes	8.3	8.6	4.9
30 Minutes	22.9	18.1	12.7
60 Minutes	31.7	27.5	27.0
90 Minutes	14.9	13.0	17.6
2 Hours	12.7	13.1	17.5
4 Hours	6.4	4.3	8.1
> 4 Hours	3.0	3.6	4.7
DK/NA	0	11.9	7.5

Conclusions

- Women with NMRM were more likely to achieve peak pain intensity and peak functional impairment within one hour of headache onset compared to women with peri-menstrual attacks (PMM and MRM).
- Women with MRM had more pain interference than women with MNRM or PMM.