

NO DIFFERENCE IN PAIN INTENSITY PERCEPTION BETWEEN MIGRAINE PATIENTS WITH AND WITHOUT ICTAL ALLODYNIA

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BACKGROUND

In the last years, several studies investigated pain thresholds in patients with migraine during both attacks and interictal periods. However, pain perception in patients with migraine has been poorly explored.

OBJECTIVE

To investigate perception intensity of trigeminal heat stimulation (THS) in patients with migraine without (MwoA CA-) and with allodynia (MwoA CA+) compared to healthy controls (HC) and correlation with clinical parameters of migraine severity.

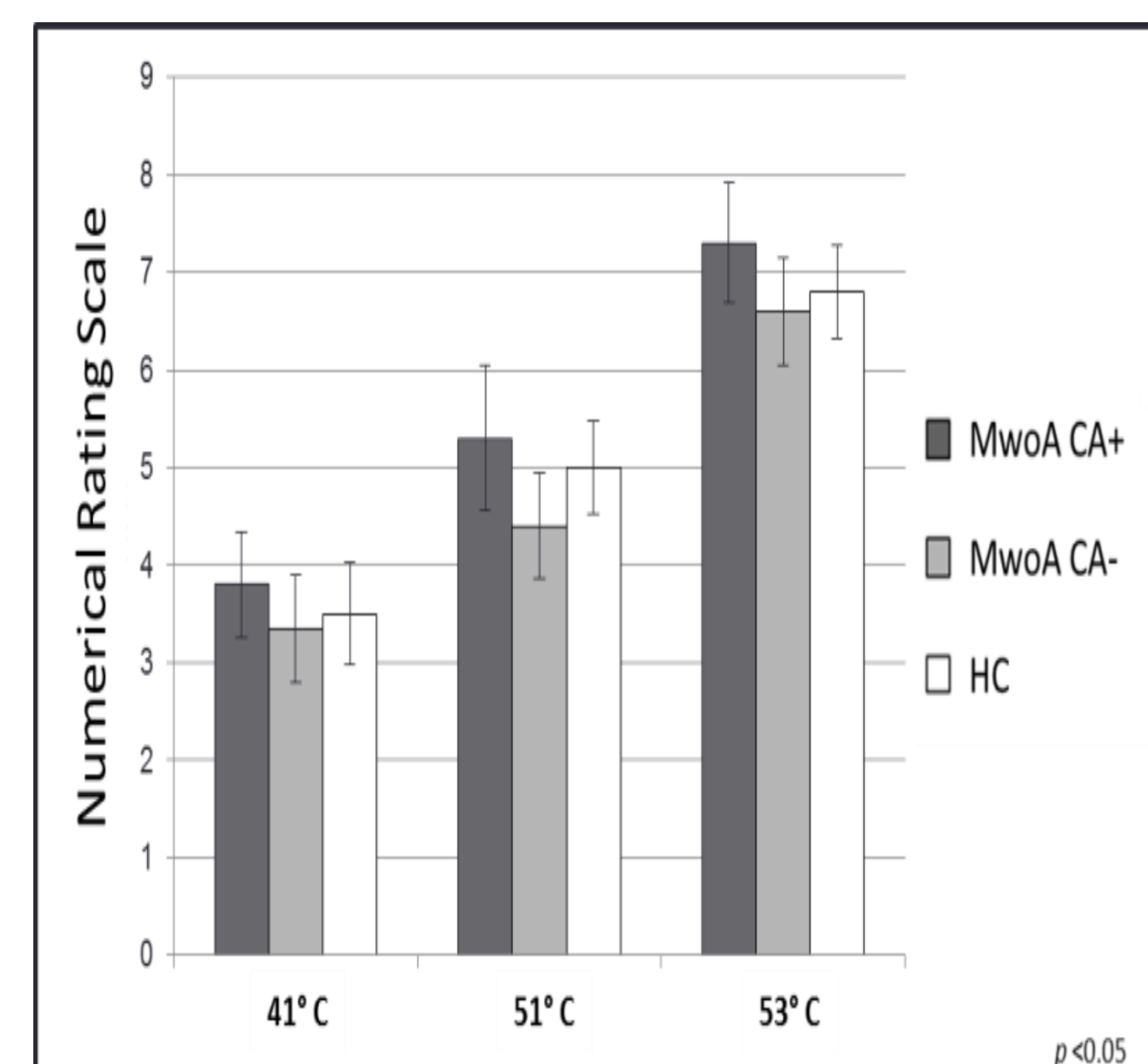
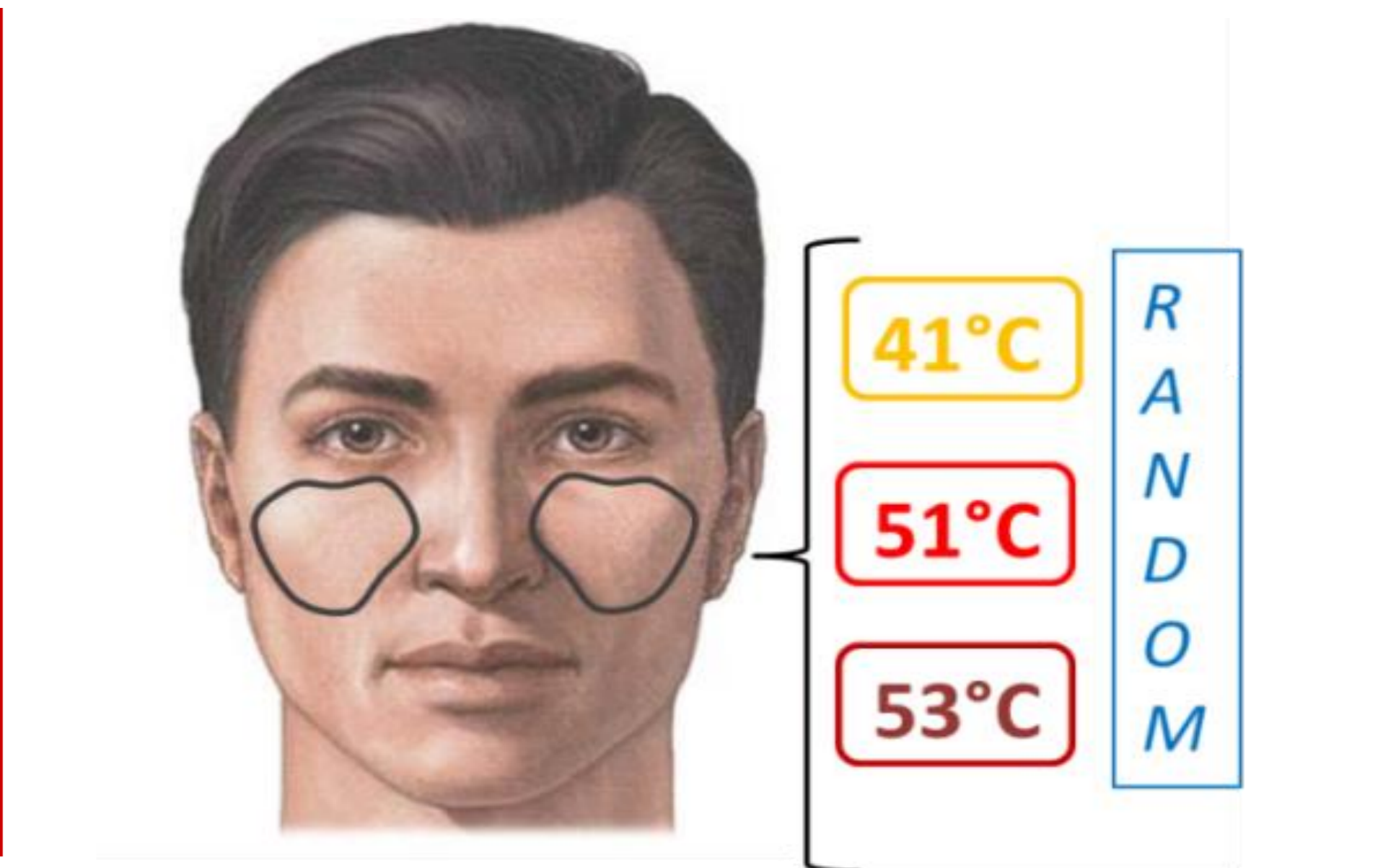
METHODS

We enrolled 80 patients with migraine (40 patients with MwoA CA- and 40 patients with MwoA CA+) and 60 HC. THS was performed using the contact heat evoked potential stimulator (CHEPS) at three different intensities: a low-innocuous stimulus at 41°C and two painful heat stimuli at 51° and 53°C. Subjects had to verbally rate the intensity perception of the stimulus by means of a numerical rating scale (NRS) ranging from 0 to 10.



RESULTS

NRS of pain perception was not significantly different between patients with MwoA (as a group) and HC at any level of experimental stimuli. The absence of significant differences in pain perception was also found between patient groups defined as patients with MwoA CA- and with MwoA CA+ compared to HC, at any level of experimental stimuli.



CONCLUSION

We hypothesized that CA, subtended by central sensitization of trigeminovascular neurons, may revert during interictal period without consequences on pain perception. Central sensitization could become progressively more severe over time and, by an imbalance between the inhibition and the facilitation of pain dynamics, might contribute to chronification phenomena, interictal CA and pain perception abnormalities.

REFERENCES

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