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Effects of URB937 on an animal model of migraine pain

R Greco[1], AS Mangione[1], R De Icco[1], T Bandiera[2], G Sandrini[3], G Nappi[3], D Piomelli[4], C Tassorelli[3*]

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Several studies have suggested the existence of interactions between the endocannabinoids and migraine. URB937, a FAAH inhibitor specific to peripheral tissues, causes analgesia in animal models of pain [1]. In this study, we evaluated whether the URB937 administration may alter nociceptive responses in an animal model of migraine based on nitroglycerin (NTG)-induced hyperalgesia [2]. Rats received systemic NTG and URB937 before being evaluated at the Tail flick test or at the Formalin test. The findings show that URB937 did inhibit NTG-induced hyperalgesia at the Formalin test with only a minimal influence on the hyperalgesia at the Tail flick. The data suggest that availability of anandamide probably at the meningeal level is effective in the migraine pain.

Author details
[1]Headache Science Centre, IRCCS National Neurological Institute "C. Mondino" Foundation , Pavia, Italy. [2]Medicinal Chemistry Drug Discovery and Development, Italian Institute of Technology, Genova, Italy. [3]Headache Science Centre, IRCCS National Neurological Institute "C. Mondino" Foundation , UCADH Pavia, Italy. [4]Departments of Pharmacology and Biological Chemistry, University of California, Irvine, CA, USA.

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References

1. Clapper JR, Moreno-Sanz G, Russo R, Guijarro A, Vacondio F, Duranti A, Tontini A, Sanchini S, Sciolino NR, Spradley JM, Hohmann AG, Calignano A, Mor M, Tarzia G, Piomelli D: **Anandamide suppresses pain initiation through a peripheral endocannabinoid mechanism.** *Nat Neurosci* 2010, **13(10)**:1265-70.
2. Tassorelli C, Greco R, Wang D, Sandrini M, Sandrini G, Nappi G: **Nitroglycerin induces hyperalgesia in rats–a time-course study.** *Eur J Pharmacol* 2003, **464(2-3)**:159-62.

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[3]Headache Science Centre, IRCCS National Neurological Institute "C. Mondino" Foundation , UCADH Pavia, Italy
Full list of author information is available at the end of the article