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## ACCEPTED MANUSCRIPT

Role of ventrolateral orbital cortex muscarinic and nicotinic receptors in modulation of capsaicin-induced orofacial pain-related behaviors in rats

Esmaeal Tamaddonfard<sup>1</sup>\*, Amir Erfanparast<sup>1</sup>, Amir Abbas Farshid<sup>2</sup>, Fatmeh Delkhosh-Kasmaie<sup>2</sup>

<sup>1</sup> Division of Physiology, Department of Basic Sciences, Faculty of Veterinary Medicine, Urmia University, Urmia 5756151818, Iran.

<sup>2</sup> Division of Pathology, Department of Pathobiology, Faculty of Veterinary Medicine, Urmia University, Urmia 5756151818, Iran.

\*Corresponding author: Esmaeal Tamaddonfard, Division of Physiology, Department of Basic Sciences, Faculty of Veterinary Medicine, Urmia University, Urmia 5756151818, Iran, Phone: +98 44 32770508, Fax: +98 44 32771926

E-mail: E-Mail: e.tamaddonfard@urmia.ac.ir; e\_tamaddonfard@yahoo.com

## ABSTRACT

Acetylcholine, as a major neurotransmitter, mediates many brain functions such as pain. This study was aimed to investigate the effects of microinjection of muscarinic and nicotinic acetylcholine receptor antagonists and agonists into the ventrolateral orbital cortex (VLOC) on capsaicin-induced orofacial nociception and subsequent hyperalgesia. The right side of VLOC was surgically implanted with a guide cannula in anaesthetized rats. Orofacial pain-related behaviors were induced by subcutaneous injection of a capsaicin solution (1.5  $\mu$ g/20  $\mu$ l) into the left vibrissa pad. The time spent face rubbing with

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