

COMMENTARY

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Liraglutide exhibits anti-inflammatory activity through the activation of the PKA/CREB pathway

Li Wang^{1*}, Linjie Feng² and Jingyu Zhang¹

Abstract

Qihong Que and colleagues found that liraglutide exhibited anti-inflammatory activity through the activation of the PKA/CREB pathway in an OA rat model. We believe there was a flaw in this research. In their first experiment, the sacrifice time of the 10 rats in the control group has not been stated. And when the rats in the OA-1, OA-5, OA-10, OA-20 and OA-28 groups were sacrificed, they were in different weeks of age. If the rats in the control group were compared to the rats in the OA-1, OA-5, OA-10, OA-20 and OA-28 groups respectively, the results may be biased due to differences in the week age of the rats. We believe that addressing this issue could further increase the value of their study.

Keywords: GLP-1R, Liraglutide, PKA/CREB pathway, Inflammation, Osteoarthritis

Main text

Qihong Que. and colleagues [1] found that liraglutide exhibited anti-inflammatory activity through the activation of the PKA/CREB pathway in an OA rat model. We believe there was a flaw in this research. In their first experiment, the sacrifice time of the 10 rats in the control group has not been stated. And when the rats in the OA-1, OA-5, OA-10, OA-20 and OA-28 groups were sacrificed, they were in different weeks of age. If the rats in the control group were compared to the rats in the OA-1, OA-5, OA-10, OA-20 and OA-28 groups respectively, the results may be biased due to differences in the week age of the rats. We believe that addressing this issue could further increase the value of their study.

We declare no competing interests.

Conclusions

Qihong Que. and colleagues found that liraglutide exhibited anti-inflammatory activity through the activation of the PKA/CREB pathway in an OA rat model. We believe there was a flaw in this research.

Abbreviations

CREB: cyclic adenosine monophosphate (cAMP) response element-binding; OA: osteoarthritis; PKA: protein kinase A

Acknowledgements

Not applicable.

Authors' contributions

LW was a major contributor in writing the manuscript. All authors read and approved the final manuscript.

Funding

No funding was obtained for this study.

Availability of data and materials

Not applicable.

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Author details

¹Department of Hand Surgery, The Second Hospital of Tangshan, No. 21 Jianshe Road, Tangshan, Hebei, 063000 Tangshan, Hebei, People's Republic of China. ²Department of Orthopedics, North China University of Science and Technology Affiliated Hospital, Tangshan, Hebei, People's Republic of China.

* Correspondence: tseywl@126.com

¹Department of Hand Surgery, The Second Hospital of Tangshan, No. 21 Jianshe Road, Tangshan, Hebei, 063000 Tangshan, Hebei, People's Republic of China

Full list of author information is available at the end of the article



Received: 11 July 2019 Accepted: 27 September 2019
Published online: 11 October 2019

Reference

1. Que Q, Guo X, Zhan L, et al. The GLP-1 agonist, liraglutide, ameliorates inflammation through the activation of the PKA/CREB pathway in a rat model of knee osteoarthritis. *J Inflamm (Lond)*. 2019;16:13.

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