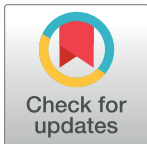


CORRECTION

Correction: Specific transfection of inflamed brain by macrophages: A new therapeutic strategy for neurodegenerative diseases

Matthew J. Haney, Yuling Zhao, Emily B. Harrison, Vivek Mahajan, Shaheen Ahmed, Zhijian He, Poornima Suresh, Shawn D. Hingtgen, Natalia L. Klyachko, R. Lee Mosley, Howard E. Gendelman, Alexander V. Kabanov, Elena V. Batrakova

In [Fig 3](#), there is an error in the image of panel B. Please see the correct [Fig 3](#) and its caption here.



OPEN ACCESS

Citation: Haney MJ, Zhao Y, Harrison EB, Mahajan V, Ahmed S, He Z, et al. (2024) Correction: Specific transfection of inflamed brain by macrophages: A new therapeutic strategy for neurodegenerative diseases. PLoS ONE 19(7): e0306688. <https://doi.org/10.1371/journal.pone.0306688>

Published: July 2, 2024

Copyright: © 2024 Haney et al. This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

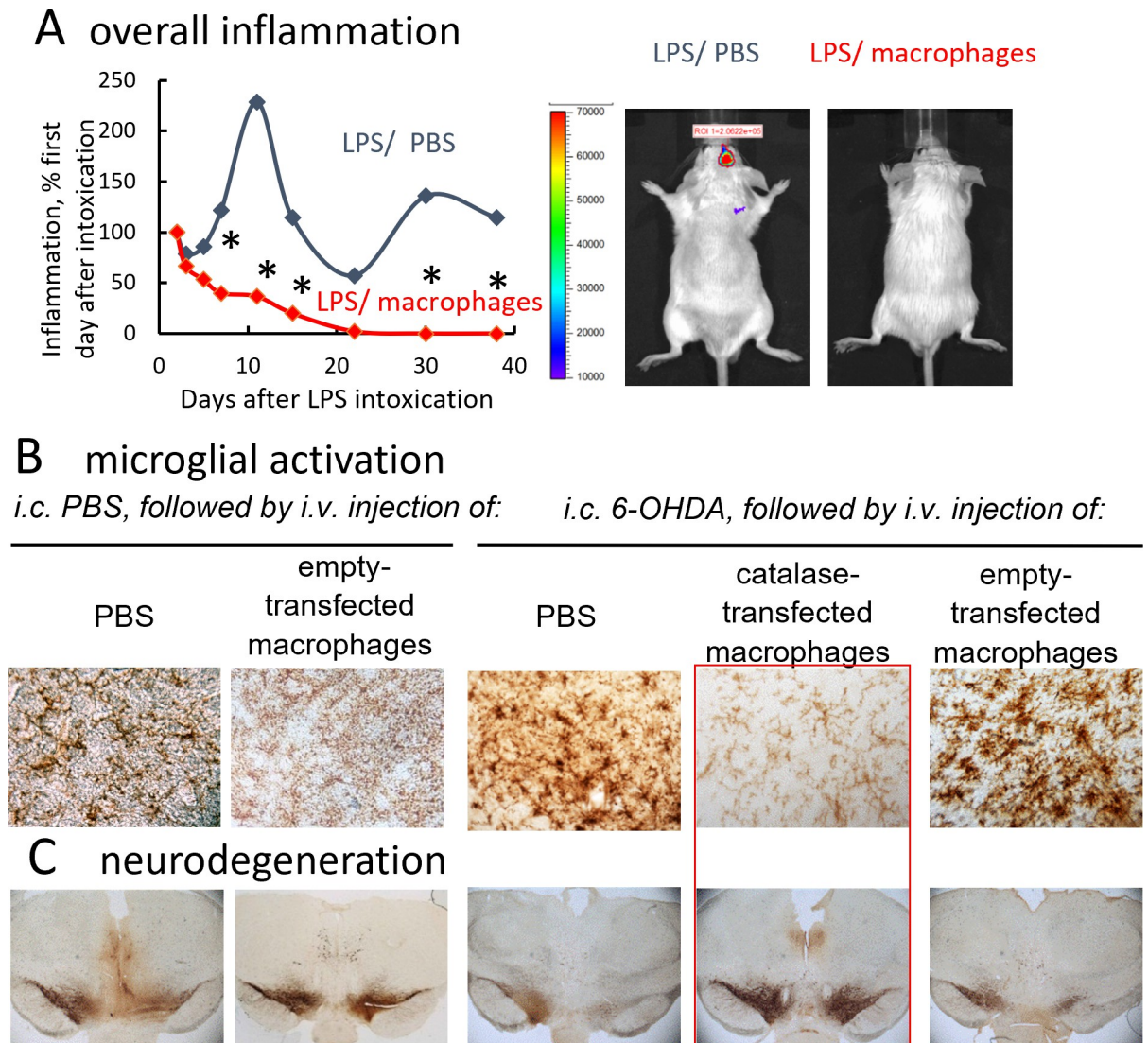


Fig 3. Anti-inflammatory and neuroprotective effects of catalase-transfected macrophages in PD murine models. (A): LPS-induced encephalitis in BALB/C mice were injected *i.v.* with catalase-transfected macrophages (red curve), or PBS (blue curve). IVIS images over 40 days were taken ten minutes after intraperitoneal (*i.p.*) injection of a Xenolight Rediject probe for inflammation. The chemiluminescent signal was quantified and presented as radiance ratios of treated animal after 24 hours after LPS injection and at various times thereafter. Genetically modified macrophages caused prolonged decreases of neuroinflammation in LPS-intoxicated mice. IVIS representative images at day 30 are shown. (B) and (C): BALB/c mice were *i.c.* injected with 6-OHDA. Forty-eight hours later animals were *i.v.* injected with catalase-transfected macrophages, and 21 days later they were sacrificed, and mid-brain slides were stained for expression of B: CD11b, a marker for activated microglia or C: TH, a marker for dopaminergic neurons. Whereas 6-OHDA treatment caused significant microglia activation and neuronal loss, administration of catalase-transfected macrophages dramatically decreased oxidative stress and increased neuronal survival. Administration of empty vector transfected macrophages did not affect microglia activation, or number of dopaminergic neurons in mice with brain inflammation. Statistical significance (shown by asterisk; $p < 0.05$) was assessed by a standard t-test compared to mice with *i.c.* LPS injections followed by *i.v.* PBS injections (healthy controls). Values are means \pm SEM (N = 4).

<https://doi.org/10.1371/journal.pone.0306688.g001>

Reference

1. Haney MJ, Zhao Y, Harrison EB, Mahajan V, Ahmed S, He Z, et al. (2013) Specific Transfection of Inflamed Brain by Macrophages: A New Therapeutic Strategy for Neurodegenerative Diseases. PLoS ONE 8(4): e61852. <https://doi.org/10.1371/journal.pone.0061852> <https://doi.org/10.1371/journal.pone.0061852> PMID: 23620794