

Parkinson’s Disease & Movement Disorders

Activation of NLRP3-infammasome in the MPTP mouse model of Parkinson’s disease might be triggered by HMGB1-MAC-1 axis

University of Aberdeen, UK

Microglia in Parkinson's disease (PD). We investigated the role of HMGB1 in PD in the MPTP mouse model of PD. In this study, we used HMGB1 in PD in the MPTP mouse model of PD. NLRP3 (NOD-like receptor protein 3) is a member of the NLRP3-inflammasome family, which is involved in the activation of caspase-1 and the production of IL-1β. C57BL/6 mice were used in this study. The results showed that HMGB1 is involved in the activation of NLRP3-inflammasome in the MPTP mouse model of PD. This is the first time that HMGB1 has been shown to be involved in the activation of NLRP3-inflammasome in the MPTP mouse model of PD. Our findings suggest that HMGB1-MAC-1 axis might be involved in the activation of NLRP3-inflammasome in the MPTP mouse model of PD.