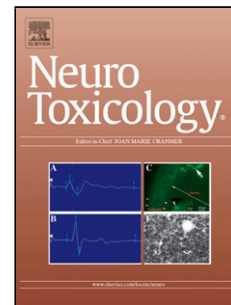


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Sodium *P*-aminosalicylic acid inhibits sub-chronic manganese-induced neuroinflammation in rats by modulating MAPK and COX-2

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Highlights

- Sub-chronic Mn exposure increased Mn levels in the whole blood, cortex, hippocampus and thalamus, and induced learning and memory deficits, concomitant with astrocytes activation in the cortex, hippocampus and thalamus.
- Sub-chronic Mn exposure increased inflammatory cytokines levels concomitant with increased MAPK signaling and COX-2 in the same selected brain regions, especially in the hippocampus and thalamus.
- PAS-Na treatment at the highest doses also decreased Mn levels in the whole blood and selected brain tissues, and reversed the Mn-induced learning and memory deficits.
- PAS-Na inhibited the Mn-induced increase in inflammatory cytokine levels, reducing p38, ERK MAPK pathway and COX-2 activity.

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