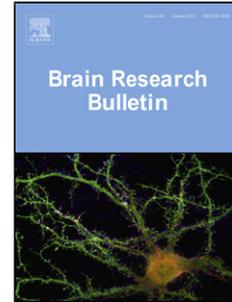


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Title: Influence of social interaction on nociceptive-induced changes in locomotor activity in a mouse model of acute inflammatory pain: use of novel thermal assays

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Highlights:

- Normal locomotion is affected by social interactions in mice
- Social interactions alter nociceptive-induced changes in locomotion
- Carprofen blocks the effect of social interaction on nociception
- A novel thermal locomotion assay allows detection of nociception in paired mice

Abstract

Most acute and chronic animal models of pain rely heavily on reflexive assays for evaluating levels of nociception, which involves removing the animal from its normal social environment. Here, we examine and characterize the influence of social interactions on inflammatory pain-evoked changes in movement in two different mouse strains. To produce inflammatory nociception, we injected CFA bilaterally into the hind paws of Balb/c and C3H mice and then recorded exploratory locomotor activity using an automated detector system to first evaluate the effects of social behavior on nociception. Secondly, we determined if

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