

Abstract Emotion

Involvement of physiological reactivity and interoception in emotional experience after a traumatic brain injury: preliminary results

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1500 characters including spaces

After a traumatic brain injury (TBI), patients often report a decrease in their ability to feel emotions, which is partially based on physiological reactivity (PR) associated with the emotion and on the ability to become aware of it, referred to as interoception. After a TBI, alterations of interoception and PR have been reported. This study aimed to explore the role of PR and interoception in emotional experience after a TBI. 17 men with moderate to severe TBI (age: $40 \pm 12,4$) and 17 healthy men (age: $37,9 \pm 15,8$), paired on age and educational level, participated in the study. We examined PR through the electrodermal activity (EDA) while participants watched positive and negative emotional films that they rated emotionally, and interoception through a heartbeat counting task (HBCT) and the MAIA questionnaire. Compared to controls, TBI patients had lower scores on the emotional awareness subscale of the MAIA; the assessment of arousal for negative films was positively correlated with HBCT scores. Furthermore, TBI patients showed lower EDA during negative films which they rated as less arousing. These results suggest a decrease in interoceptive emotional awareness, as well as in the assessment of arousal and PR for negative stimuli after TBI. The decrease in emotional experience reported by TBI patients could be explained by both reduced PR and underestimation of it due to lower interoception.

Commenté [MR1]: Apparié en âge et NSC ?

Commenté [MR2]: Je scinderais les résultats liés aux mesures interoceptives (MAIA et HCT) vs à la tâche d'évaluation de film.