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1006. Effects of Modafinil on Emotional Processing in Patients with Remitted Depression MuzafferKaser, AmyBland, Julia B Deakin, Albert Michael, Camilo Zapata, Rachna Bansal, Dragana Ryan, Francesca Cormack, James B.Rowe, Barbara J.Sahakian

Background

Cognitive dysfunction in depression is an unmet treatment need. Cognitive deficits in depression tend to persist in remission, and are associated with poorer functional outcomes (McIntyre et al. 2013). Patients with depression have cognitive deficits in cold cognition and hot cognition (emotion-laden). Recently, we showed that modafinil can improve episodic memory and spatial working memory in remitted depressed patients (Kaser et al. 2016) In this report, we present the findings on the effects of modafinil on emotional processing in patients with remitted depression.

Methods

Fifty-eight patients with remitted depression participated in the study. A randomised double-blind, placebo-controlled, parallel groups design was used. Participants received either single-dose modafinil (200 mg) or placebo. Patients completed Faces Go/No-Go tasks from EMOTICOM neuropsychological battery (Bland et al., 2016). A negative emotional bias measure (sad targets with neutral distracters minus happy targets with neutral distracters) using reaction times was used. Correct responses (hits) and false alarms were calculated as a measure of signal detection (d prime).

Results

Patients receiving modafinil showed a greater negative emotional bias (t(56) = 2.20, p=0.032) which appeared to be driven by longer reaction times to sad faces with neutral distracters compared to patients receiving placebo. There were no significant differences between d prime measures (p>0.05).

Conclusions

Modafinil led to slower responses towards sad faces indicating less negative bias in patients with remitted depression. This effect was independent of signal detection measures. Beneficial effects of modafinil on emotional processing suggested that modafinil can be used to address hot cognitive deficits associated with depression.

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