
LACK OF INHIBITORY CONTROL PREDICT RELAPSE IN PEOPLE WILLING TO STOP SMOKING

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Introduction

Most patients (70%) discontinuing tobacco smoking will relapse within 6 months. A major challenge is the understanding of the processes involved in relapse. High cigarette craving has been proposed as a predictor of relapse. A recent study suggests that low inhibitory control capacities (low ability to inhibit prepotent responses) were correlated with high nicotine dependence. In this study, we focused on the link between inhibition capacity, craving, tobacco dependence and relapse.

Method

134 smokers willing to quit smoking were consecutively included and followed prospectively. Tobacco dependence was assessed with the Fagerstorm test. We used the Hayling task to measure their inhibitory capacity and a specific questionnaire to measure tobacco craving (TCQ 12). Assessments were performed at baseline, 1, 3 and 6 months after smoking cessation. Any relapse in smoking during the follow-up was evaluated.

Results

There was an association between lower inhibition capacities and higher dependence level at baseline. Low inhibition capacities were an independent predictor of relapse at 6 months (logit $R^2 = .08$, $F(2, 134) = 10.851$, $p < .004$). In contrast, although level of tobacco dependence and craving predicted relapse in the short term (first month), they did not predict relapse at 6 months.

Conclusions:

These results suggest that inhibition capacities may predict smoking relapse in the long term (6 months) better than usual measures of craving. In clinical practice, an inhibition test, which is short and feasible, could be of interest to identify smokers at higher risk of relapse.