Chronic cannabis use does not affect the normalization of hypothalamic-pituitary-adrenal (HPA) axis induced by methadone in heroin addicts

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The hypothalamic-pituitary-adrenal (HPA) axis activity is usually altered by heroin use (Nava et al., 2006; Stimmel & Kreek, 2000). In the present study we evaluated in one hundred and twenty-one heroin addicts the effects of marijuana smoking on the normalization of the HPA axis upon methadone treatment. The study was approved by Local Ethical Committees and was conducted according to the principles of Helsinki Declaration. The study showed that in heroin addicts who are chronic cannabis smokers, a treatment with methadone lasting 12 months was able to normalize both plasma corticotropin (ACTH) and cortisol levels, as well as to control both heroin withdrawal symptoms and opioid craving. As expected in the same group of patients, marijuana smoking and its craving were not reduced by methadone treatment. Our data confirm that methadone treatment outcomes are not modified by cannabis use and they add in the literature the evidence that chronic cannabis use is not able to affect the normalization of HPA axis upon methadone treatment in heroin addicts. The above evidence fits with the consolidate data that chronic cannabis use does not facilitate heroin consumption and relapse.