Motivation for exercise: the major outcome of an adapted physical activity intervention during alcohol withdrawal.

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Résumé

BACKGROUND: Alcohol use disorder (AUD) is a mental disorder characterized by the inability of reducing or stopping alcohol drinking despite negative health consequences. It is a chronic disease with a high relapse rate and numerous complications and comorbidities. AUD patients mostly have a sedentary lifestyle (Vancampfort et al., 2019), with physical inactivity being associated with more severe clinical and psycho-affective symptoms, poorer physical condition and poorer sleep (de Ternay et al., 2022) . Physical activity (PA) is therefore a promising intervention to improve health and lifestyle with beneficial effects on physical condition and depression (Gür & Can Gür, 2020; Hallgren et al., 2017). However, it is difficult for patients to resume with and continue PA. AUD people showed a higher drop-out rate from exercise-based interventions compared to other severe mental illnesses (Hallgren et al., 2017). Thus, alcohol withdrawal is a crucial period for encouraging behavioral changes and implementing a healthier lifestyle but is also marked by symptoms that limit functioning, requiring adaptation of the proposed PA. To our knowledge, the feasibility of an adapted physical activity (APA) intervention proposed from the start of alcohol withdrawal has never been tested. Our objective was to evaluate the feasibility and the effect of an APA intervention compared with free PA (FPA) in AUD inpatients hospitalized for withdrawal.

METHOD: 64 AUD inpatients receiving usual treatment for alcohol withdrawal (motivational interview, group and individual therapy and pharmacological treatment) were sequentially distributed in 2 groups matched for age and gender. They were involved in a 3-week intervention of APA (intervention supervised by APA teachers, N=40) or FPA (free access to a gym, N=24). Functional cardiorespiratory capacity, mood, self-esteem, alcohol craving, sleep subjective quality and motivation for sport were assessed before and after interventions. The interaction effects of group and evaluation time were analyzed using GLMM models and planned comparisons.

RESULTS: We found a significant effect of time for all measures. But interaction effects

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between group and evaluation time were observed only for the motivation scores. At the end of treatment, APA had higher intrinsic (ratio = 1.46, 95%IC (1.20, 1.76), z.ratio = 3.866, p < 0.001) and extrinsic (ratio = 1.37, 95%IC (1.129 , 1.67), z.ratio = 3.177, p =0.002) motivation scores compared to FPA. There was no interaction effect on the amotivation score even tough planned comparison showed significant decrease in APA only (ratio = 0.80 , 95%IC (0.68, 0.94), SE = 0.83, p=0.008).

DISCUSSION: Improvement of health outcomes during alcohol withdrawal hospitalization is observed in both groups and cannot thus be attributed to one of the PA interventions. However, APA intervention seems to have a specific impact on motivation to exercise. These results suggest that early and brief PA intervention can improve motivation, provided that it is supervised and tailored.

CONCLUSION / PERSPECTIVES: This is an important finding, especially as subjects with AUD appear to have difficulty engaging in and maintaining active behavior. Nevertheless, an APA intervention during the first 3 weeks of hospitalization is insufficient to provide significant clinical, physiological and psychological benefits. Further studies should investigate the impact of longer intervention during and after hospitalization for alcohol withdrawal and also examine the levers influencing adherence to physical activity, in order to design more appropriate interventions.

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