

LETTERS TO THE EDITORS

Satisfactory response to electroconvulsive therapy in an autistic patient with severe self-injurious behavior

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Recent studies have shown that self-injurious episodes in autism are due to catatonic symptoms. 1-3 It has been theorized that these symptoms are caused by dysfunction of GABAergic receptors. 2 This report describes a case in which electroconvulsive therapy (ECT) was used successfully to treat self-injury in a patient with severe autism and highlights the viability of ECT as a therapeutic option for this population.

A 17-year-old male diagnosed with severe autism spectrum disorder (ASD) — with no language development and incapable of basic self-care and social interaction — was admitted to the psychiatry ward of Hospital das Clínicas, Universidade Estadual de Campinas (UNICAMP), in January 2018 due to extreme aggression and self-injurious behavior.

Several drug regimens had been trialed to control his symptoms; at the time of admission, his treatment included clozapine, haloperidol, and levomepromazine. The patient responded best to clonidine, with partial control of symptoms and decreased severity of self-injurious

episodes. However, in late March 2018, a clonidine shortage led to sudden discontinuation of treatment, and his episodes once again became more frequent and more severe (Figure 1).

ECT was prescribed, and four sessions were done in late April. The patient started to show improvement after the first session; after the second, he was able to help the staff fold bed linens and walk around the hospital's common area unaided without any inappropriate behavior. In the course of 2 weeks between the first ECT session and his hospital discharge, he had only two episodes of self-injurious behavior: one immediately after the first session, with no evident reason, and the second one during a visit from his mother, as soon as he realized she was about to leave. After his discharge, the patient continued to show improvement.

As in the case described herein, the first line of treatment for self-injurious symptoms of catatonia is behavioral therapy and pharmacotherapy⁴; common agents include clozapine⁵ and risperidone.⁴ Both are supported by studies, but some patients may respond poorly, thus suggesting the need for alternative treatments.

The effects of ECT on the brain are still unclear. Hypotheses include increased GABAergic function, decreased function of dopaminergic and serotoninergic receptors as a secondary effect, normalization of the hypothalamic-pituitary-adrenal axis, and release of other, previously inhibited neuromodulators.^{2,3}

More studies are needed to provide additional data on the utility of ECT to treat self-injurious behavior in patients with severe ASD and provide criteria for the use of ECT for this purpose. It is important that behavioral therapies and pharmacological intervention be prioritized in such cases, given the large body of evidence proving their efficacy. Nevertheless, ECT shows promising results for patients refractory to behavioral and pharmacological treatment, and may become a first-line therapy in the near future.

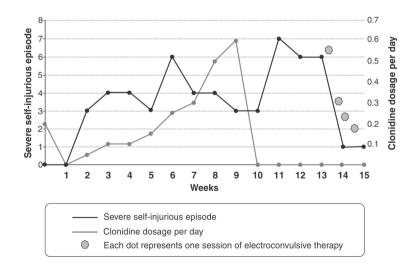


Figure 1 Relationship between severe self-injurious behavior, clonidine withdrawal, and electroconvulsive therapy sessions during hospitalization.

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"I want it all, I want it all, I want it all, and I want it now!" Is higher impulsivity associated with higher satisfaction with life?

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Impulsive behavior – when a person acts without considering the consequences of their behavior – is a core feature of several psychiatric disorders. Most people, intuitively, associate the satisfaction of immediate desires with a sense of well-being, especially in contemporary

society.² In common sense, immediate rewards are considered particularly advantageous to the person and others in their social life.² This image is deeply reinforced by culture and media, especially towards young people, who are already more impulsive and prone to risk-taking behavior.¹

There is an implicit association between satisfying an immediate desire and happiness or satisfaction. Happiness has long been studied by different areas of knowledge, and many types of research have tried to define this construct. No consensus has been reached; however, researchers agree that subjective well-being is essential to happiness and satisfaction with life. The latter is defined as a "global assessment of a person's quality of life according to his chosen criteria." It is a subjective measure, which does not rely on objective factors or indicators, but only on the subject's own perception.

Empirical studies consistently show an association between impulsivity and several adverse outcomes in daily life, including worse mental health and reduced overall psychosocial functioning. However, if the satisfaction of immediate needs is associated with higher satisfaction of life – an entirely subjective measure – measures of well-being may show a positive association with impulsivity.

To test this hypothesis, we investigated the correlation between impulsivity and satisfaction with life in a sample of 538 Brazilian adults (381 women; mean age 28 ± 10 years), recruited via an online survey. The local ethics board approved all procedures. The sample size allowed the detection of large, moderate, or small correlations with 99% power. We evaluated participants with the abbreviated version of the Barratt Impulsiveness Scale (ABIS-11), a measure of impulsivity, and the Satisfaction with Life Scale, one of the most widely used scales for this purpose. Higher scores in the impulsivity scale indicate poor impulse control, while higher scores in the life satisfaction scale indicate greater well-being.

Figure 1 shows the Pearson correlation between the two measures. We found a moderate negative correlation between impulsivity and satisfaction with life (r = -0.469, p < 0.001, R^2 = 0.22), suggesting that more impulsive people reported lower well-being. We repeated the analysis using partial correlations controlling for confounding factors (age, sex, socioeconomic status, non-psychotic psychiatric symptoms, history of psychiatric disorders, current use of psychotropic medication, and personality factors – neuroticism, extraversion, openness, agreeableness, and conscientiousness). The correlation remained significant, although the effect size was smaller (r = -0.301, p < 0.001, R^2 = 0.09).

People who exhibit higher impulsive behavior tend to satisfy their immediate desires and expect higher life satisfaction. However, as seen in our data, higher self-control is associated with better satisfaction with life, at least in a cross-sectional design, although this finding is usually corroborated in prospective studies. These results suggest that immediate rewards (or high impulsivity) may not be associated with increased well-being overall.