

Electroconvulsive therapy (ECT) effective for psychotic recrudescence and suicidality after varenicline adjunctive therapy for smoking cessation in a schizoaffective patient

Eletroconvulsoterapia efetiva para recrudescimento psicótico e suicidalidade após terapia adjuntiva com vareniclina para cessação de tabagismo em paciente esquizoafetivo

Dear Editor,

Schizoaffective patients present the highest rates of smoking and heavy smoking among all diagnostic groups, including schizophrenia and bipolar disorder.¹ Smoking cessation is a major treatment objective, but many patients experience difficulties and relapse. Adjunctive pharmacotherapy with varenicline brings new hopes.

A 56-year-old schizoaffective obese woman, with arterial hypertension and mild chronic obstructive pulmonary disease was frustrated in previous attempts to quit smoking, either with the aid of psychosocial treatment alone or combined with nicotine gum and patch. Bupropion had to be discontinued due to the irruption of manic symptoms. Her mother had bipolar I disorder. From age 18 (first psychiatric hospitalization), haloperidol was the main antipsychotic drug for thirty years. She did not want to quit during these initial years, and smoked up to 100 cigarettes per day. Adherence to psychiatric treatment was incomplete, with eight life-threatening suicide attempts. In subsequent years, haloperidol was substituted for lithium plus ziprasidone, improving compliance and stability. Thirty months later, she started to express a desire to quit cigarettes. Varenicline was titrated from 0.5mg once a day to 1mg twice a day, and the first month passed with only minor mood changes. In the second month, the following escalating mixed symptomatology built up rapidly: increased energy, logorrhea, grandiosity, irritability, impulsivity, voices commenting on her, paranoid ideation, nihilistic ideas about the future, intense self-criticism, frequent crying, and continuous suicidal ideation, with a specific plan. She recovered with 6 bilateral, bitemporal ECT sessions. As for the consequences attributable to varenicline, she later evaluated such treatment as highly beneficial and valuable to

her health. She now completed two years of tobacco abstinence. Varenicline-aided smoking cessation treatment may have had a role in triggering psychotic recrudescence and suicidal behavior.

Current smoking, smoking cessation, and medications for smoking cessation (bupropion, rimonabant, and varenicline) were all previously associated with suicide.² Schizoaffective disorder is also significantly associated with suicide. Cigarette smoking decreases serotonin turnover and inhibits brain monoamine oxidase, increasing impulsivity and suicidality in a recently abstinent schizoaffective patient. Mood improving and antidepressant augmenting properties of varenicline have been previously described,³ and such a drug might concur to generate unstable mood. Particular vulnerabilities to nicotine, nicotine abstinence, and varenicline might be determined by variants of the nAChR gene recently found in schizoaffective disorder,⁴ which might favor fast built up of impulsivity and suicidality with varenicline use. GABA-A receptor beta subunits, GABRB4 and GABR1, could also be involved.⁵

According to the American Psychiatric Association, ECT is currently the best treatment for a rapid response to psychosis or suicidality. In spite of this, ECT has no visibility in the literature of smoking cessation treatments. We recommend that ECT be considered for psychotic recrudescence and suicidality in the context of varenicline adjunct therapy for smoking cessation in schizoaffective patients.

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* Modest

** Significant

*** Significant: Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.

Note: UFMG = Universidade Federal de Minas Gerais; FHEMIG = Fundação Hospitalar do Estado de Minas Gerais.

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