

P-1251 - SMOKING AND SCHIZOPHRENIA - CASE STUDY

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Objectives: To determine the relationship between smoking and: 1) exacerbation of positive symptoms of schizophrenia; 2) reduction of negative symptoms of schizophrenia.

Clinical case: 31-year old man, smoker of 30 units-pack-year, with the diagnosis of paranoid schizophrenia since 2009, when he was admitted to the Centro Hospitalar Psiquiátrico de Lisboa. He was treated with risperidone, clozapine, quetiapine and ciamemazine, with reduction of positive symptoms and improvements in functional and social skills. There was persistence, however, of affective incongruity, discrete auditory-verbal hallucinations, attenuated feelings of passivity and residual delusion. During ambulatory follow-up the patient stated, concerning his habits of smoking, that: "*when I am not smoking voices are feeble*" (sic).

Discussion: Studies show that some ingredients of cigarette smoke (mainly polycyclic aromatic hydrocarbons) have an accelerating effect on the metabolism of several antipsychotics (i.e. clozapine, olanzapine, members of the phenothiazine group, and haloperidol). Other studies suggest that nicotinic receptor agonists (such as nicotine) may have a therapeutic role in the treatment of cognitive impairments (i.e. disturbances in attention and in verbal, visual and working memories) in schizophrenia, and in turn, abstinence from tobacco can lead to deterioration of cognitive and psychomotor performance in this patients population.

Conclusions:

- 1) Exacerbations of positive symptoms may be related to decreased effectiveness of certain antipsychotics in result of an accelerated metabolism induced by cigarette smoking.
- 2) Nicotine may reduce some negative symptoms of schizophrenia, including cognitive impairment.