

Varenicline: the risks of over-the-counter sales in Brazil

Rev Bras Psiquiatr. 2013;35:442–443

doi:10.1590/1516-4446-2013-1107

Brazil faces a knowledge gap concerning the factors associated with smoking patterns.¹ In their large survey, Opaleye et al. report that approximately 16% of the 7,921 interviewees reported daily use of cigarettes, of whom 65% stated a wish to reduce or quit smoking.¹ Varenicline, a partial agonist of the $\alpha 4\beta 2$ nicotinic acetylcholine receptor, is considered one of the first-line treatments for tobacco dependence, which also include nicotine replacement therapy and bupropion.² The efficacy of varenicline as a smoking cessation treatment is attributable to its binding and activation of the receptor at a significantly lower concentration than nicotine, thus preventing nicotine binding.³

During post-marketing surveillance studies, varenicline use was found to be associated with neuropsychiatric side effects, such as changes in behavior, depressed mood, and suicidal thoughts or actions.^{2,3} These side effects can occur in patients with or without preexisting neuropsychiatric disorders.³ Since some of these effects are related to nicotine withdrawal, it is difficult to distinguish whether the cause is the drug or the abstinence.⁴ In 2009, the Food and Drug Administration (FDA) required manufacturers of varenicline to add a boxed warning to its label.⁴ According to Rigotti,² varenicline represents an important treatment for tobacco dependence, but the decision to prescribe it requires careful consideration of the risk–benefit balance and close monitoring by clinicians. The medication should be discontinued immediately if symptoms that concern the clinician, caregivers, family, or patient are observed.³

In Brazil, although varenicline is approved for sale “by prescription only,” it is readily available for purchase over the counter. No data are available on the number of side effects associated with the use of this drug in the country. The Brazilian Health Surveillance Agency (ANVISA) states that the release of this information was not authorized. Moore et al. assert that varenicline use is associated with an increased risk of suicidal/self-injury behavior and depression in smokers attempting to quit.⁵ Data for this study were drawn from case reports of adverse drug events received by the FDA from 1998 to 2010. The authors identified 3,249 cases of suicidal behavior and depression, with varenicline accounting for 90% of reports. The increased risk associated with this medication remained disproportionate even after comparison with other medications for smoking cessation, such as bupropion and nicotine replacement therapy, and after exclusion of case reports involving concomitant therapy with drugs carrying boxed warnings or precautions for suicidality in their prescribing information. Given

the potential risks of varenicline, we believe that its sale in Brazil should only happen with retention of the prescription form. As tobacco dependence is a complex syndrome, it is essential that skilled health professionals help patients in the cessation process.

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Submitted Feb 18 2013, accepted Apr 01 2013.

Acknowledgements

The authors have received financial support from Associação Fundo de Incentivo à Pesquisa (AFIP), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), and Coordenação de Aperfeiçoamento Pessoal de Nível Superior (CAPES).

Disclosure

The authors report no conflicts of interest.

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