## **Bipolar patients treated for** hepatitis C with interferon alpha

Pacientes com transtorno afetivo bipolar tratados com interferon alfa para hepatite C

Dear Editor,

Bipolar disorder is a common disorder which affects approximately 1% of the population and is associated whith chronicity and severity features such as low remission rates, high prevalence of clinical and psychiatric comorbidities and a significant functional and cognitive impairment<sup>1,2</sup>. Infection with hepatitis C virus (HCV) is a chronic blood-born disease, with an estimated general prevalence of 1-2.4%3. Moreover, this infection affects 10% to 15% of bipolar disorder patients4.

Interferon-alpha treatment is used in combination with ribavirin in order to eradicate HCV infection promoting viral clearance rates of 54% to 56%4. Despite these clinical benefit, antiviral treatment of chronic hepatitis C with interferon-alpha is associated with several neuropsychiatric side-effects such as psychosis, major depression, and neuropsychological dysfunction<sup>5</sup>. In addition, psychiatric comorbidity has been used as an exclusion criterion in several large HCV clinical trials<sup>6,7</sup>.

As a consequence, the antiviral treatment of HCV-infected mental disorder patients is an understudied field, resulting in a major unmet clinical need.

Case report: C is a 44-year-old man, married, with a twentyyear history of bipolar disorder (BD) and chronic hepatitis C, genotype 1, with unknown path of infection. His affective disorder is characterized by predominance of manic phases and has had a favorable response to lithium carbonate 900 mg/day. He reported a total of four manic episodes in his life, including one with psychotic features, but has been euthymic for the last two years. The patient and his family decided to treat the chronic hepatitis C and accepted the conditions to remain in the psychiatric treatment and to attend all medical appointments. He initiated the treatment with pegylated interferon-alpha 180 µg/wk plus ribavirin 1.200 mg/ day. During antiviral therapy he only presented fatigue and nonsignificant weight loss, being able to complete the treatment with no occurrence of psychiatric symptoms.

Discussion: Clinicians, both psychiatrists and hepatologists, are often faced with the dilemma of treating HCV-infected individuals with bipolar disorder. Although current or previous bipolar disorder is still considered a controversial issue for antiviral treatment with interferon-alpha, the ability of these severely mentally ill patients to tolerate side-effects and adhere to HCV treatment has been shown4. It has been demonstrated that several factors would influence patient selection for HCV treatment: the clinical course of the bipolar illness, compliance with medications, frequency of previous hospitalizations, and the presence of a functional emotional and psychosocial support system<sup>4</sup>. In addition, some important topics must be continually reinforced by the psychiatric team when treating patients with severe mental illness: 1) the need for education about the potential to achieve the cure of hepatitis: 2) avoidance of liver toxins, including drug abuse; 3) information about the potential occurrence of neuropsychiatric side-effects, including the fact that these can be treatable and reversible. Another important topic is that an informed-consent form should be applied. The Brazilian Health Ministry Protocol requires that psychiatric patients with chronic hepatitis C should only be treated with interferon if they are in a stable condition, having regular specialist care, and receiving a psychiatric report allowing the treatment8.

We have to emphasize that not all bipolar patients can be treated for their chronic hepatitis C; only those who are highly motivated and engaged in an intensive psychiatric care program are prepared for antiviral therapy<sup>3,4</sup>.

It cannot be forgotten that further prospective, controlled studies, randomized by age, gender, genotype, and psychiatric group are needed to better investigate the presented issues.

Lucas C. Quarantini, Vania B. Powell, Fabiana Nery-Fernandes Teaching Hospital, Universidade Federal da Bahia (UFBA), Salvador (BA). Brazil

Irismar R. de Oliveira, Angela Miranda-Scippa Neuroscience Department, Universidade Federal da Bahia (UFBA), Salvador (BA), Brazil

## Disclosures

Writting group member	Employment	Research grant <sup>1</sup>	Other research grant or medical continuous education <sup>2</sup>	Speaker's honoraria	Ownership interest	Consultant/ Advisory board	Other <sup>3</sup>
Lucas C. Quatantini	UFBA	CNPq**	Eli Lilly* Astra-Zeneca*			Jonhson's Jonhson* Conectfarma*	
Vania B Powell	EBMSP	CNPQ*					
Fabiana Nery- Fernandes							
Irismar R.de Oliveira	UFBA	CNPq** Acadia** Astra-Zeneca** Bristol** Janssen** Lilly** Pfizer**		Astra-Zeneca* Bristol* Janssen* Lundbeck* Servier*		Astra-Zeneca* Janssen*	
Angela Miranda- Scippa	UFBA	CNPq**		Astra Zeneca* Ely Lilly* Lundbeck*			

<sup>\*</sup> Modest

## References

- Machado-Vieira R, Soares J. Transtornos de humor refratários a tratamento. Rev Bras Psiguiatr. 2007;29(Supl II):S48-54.
- Schneider J, Candiago R, Rosa A, Ceresér K, Kapczinski F. Cognitive impairment in a Brazilian sample of patients with bipolar disorder. Rev Bras Psiguiatr. 2008;30(3):209-14.
- Schaefer M, Hinzpeter A, Mohmand A, Janssen G, Pich M, Schwaiger M, Sarkar R, Friebe A, Heinz A, Kluschke M, Ziemer M, Gutsche J, Weich V, Halangk J, Berg T. Hepatitis C treatment in "difficultto-treat" psychiatric patients with pegylated interferon-alpha and ribavirin: response and psychiatric side effects. Hepatology. 2007;46(4):991-8.
- Rifai MA. Hepatitis C treatment of patients with bipolar disorder: a case series. Prim Care Companion J Clin Psychiatry. 2006;8(6):361-6.
- Quarantini LC, Miranda-Scippa A, Schinoni MI, Sampaio AS, Santos-Jesus R, Bressan RA, Tatsch F, de Oliveira I, Paraná R. Effect of amantadine on depressive symptoms in chronic hepatitis C patients treated with pegylated interferon: a randomized, controlled pilot study. Clin Neuropharmacol. 2006;29(3):138-43.
- National Institutes of Health. National Institutes of Health Consensus Development Conference Statement: Management of hepatitis C: 2002. Hepatology. 2002;36(5 Suppl 1):S3-20.
- Quarantini LC, Bressan RA, Galvão A, Batista-Neves S, Paraná R, Miranda-Scippa A. Incidence of psychiatric side effects during pegylated interferon- alpha retreatment in nonresponder hepatitis C virus-infected patients. Liver Int. 2007;27(8):1098-102.
- Sociedade Brasileira de Infectologia SBI. [citado 2007 out. 12]. Disponível em: http://www.sbinfecto.org.br/anexos/MS- SVS Portaria%20Hepatites%20Virais\_D0Uout2007.pdf

<sup>\*\*</sup> Significant

<sup>\*\*\*</sup> Šignificant. 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: UFBA = Universidade Federal da Bahia; EBMSP = Escola Bahiana de Medicina e Saúde Pública; CNPq = Conselho Nacional de Pesquisa e Desenvolvimento. For more information, see Instructions for authors.