

**Figure 1** A) Small meningioma in the left frontal high convexity. B) At 1 year, a new meningioma was visible in the cribriform plate of the ethmoid.

agitated, sleepless, and exhibiting signs of memory loss over the previous 2 months.

She had no history of alcohol or other drug abuse, and no prior psychiatric history. Blood tests, serologies, drug screening, and electroencephalography (EEG) showed no abnormalities.

The patient had been on citalopram 20 mg/day for 1 month as prescribed by her geriatrician. We decided to switch her medication to quetiapine 50 mg/day, and requested a head computed tomography (CT) scan and advice from the neurology service.

After 2 weeks, the patient was more communicative and said that her husband had been filming her at home. Head CT showed no abnormalities, and she was discharged from the neurology service. However, we insisted that a magnetic resonance imaging (MRI) scan of the brain should be performed and increased the dose of quetiapine to 100 mg/day.

At 1-month follow-up, the patient was asymptomatic and asked: "How could I believe that my husband wanted to harm me?" MRI showed a small meningioma in the left frontal high convexity (Figure 1A) and she was referred for neurosurgical evaluation, but the neurosurgeon recommended watchful waiting.

The patient returned after 1 year, still on regular quetiapine therapy (100 mg/day). Although well, she complained of headaches and memory lapses. There were no signs or symptoms of intracranial hypertension. Blood tests, serologies, and EEG remained normal. Nevertheless, we requested another MRI scan, which showed enlargement of the frontal meningioma and emergence of a new tumor in the cribriform plate of the ethmoid (Figure 1B). Two weeks later, the patient came to evaluation in a very agitated state, asking why we had "posted what she had told us on Facebook." After a 30-day course of olanzapine 5 mg/day, the patient improved substantially. Olanzapine was well tolerated and the patient did not experience adverse effects. When last seen in August 2014, she was well and remained on olanzapine 5 mg/day.

Meningiomas are benign neoplasms of the central nervous system, highly prevalent among elderly women.<sup>1</sup> Benign cerebral tumors such as these may not cause any symptoms other than psychiatric manifestations until they are quite large. Analyses of correlation between peritumoral edema and coexistence of psychiatric symptoms have

indicated that the underlying pathophysiological mechanism is likely related to disruptions in intracerebral pathways rather than with a mass effect of meningioma on intracranial pressure.<sup>2</sup> Indeed, headache, papilledema, and focal neurological signs often arise only when the meningioma has reached an advanced stage. Often, the correct diagnosis is established only after intracranial hypertension has caused irreversible cerebral damage.<sup>2,3</sup>

Meningiomas can cause delusions, especially when located in the cerebral convexities.<sup>2,4</sup> Based on the case reported herein, a low dose of olanzapine seems to be safe and effective for the treatment of such clinical presentations.

When an older adult with no history of mental illness develops psychiatric symptoms, other medical conditions should be considered in the differential diagnosis. Severe diseases may be overlooked if this recommendation is disregarded.<sup>5</sup>

Joao P. Maia-de-Oliveira,<sup>1,2,3</sup> Lizie E. Brasileiro,<sup>3</sup>  
Carlos E. Correia,<sup>3</sup> João P. Machado-de-Sousa,<sup>1,2</sup>  
Jaime E. Hallak<sup>1,2</sup>

<sup>1</sup>Universidade de São Paulo (USP), Ribeirão Preto, SP, Brazil.

<sup>2</sup>National Science and Technology Institute for Translational Medicine (INCT-TM). <sup>3</sup>Universidade Federal do Rio Grande do Norte (UFRN), Natal, RN, Brazil

Submitted Aug 30 2014, accepted Nov 10 2014.

## Disclosure

The authors report no conflicts of interest.

## References

- Whittle IR, Smith C, Navoo P, Collie D. Meningiomas. *Lancet*. 2004;363:1535-43.
- Lampl Y, Barak Y, Achiron A, Sarova-Pinchas I. Intracranial meningiomas: correlation of peritumoral edema and psychiatric disturbances. *Psychiatry Res*. 1995;58:177-80.
- Maurice-Williams RS, Dunwoody G. Late diagnosis of frontal meningiomas presenting with psychiatric symptoms. *Br Med J (Clin Res Ed)*. 1988;296:1785-6.
- Hunter R, Blackwood W, Bull J. Three cases of frontal meningiomas presenting psychiatrically. *Br Med J*. 1968;3:9-16.
- Maia-de-Oliveira JP, Pinto JP, Alexandre V, Machado-de-Sousa JP, Morais SL, Chaves C, et al. A false case of clozapine-resistant schizophrenia. *Case Rep Med*. 2010;2010:534027.

## Sexual abuse and suicide attempt in bipolar type I patients

Rev Bras Psiquiatr 2015;37:180-182  
doi:10.1590/1516-4446-2014-1624

Bipolar disorder (BD) is the psychiatric diagnosis that carries the highest risk for suicide behavior. Many different factors are associated with suicide behavior in BD, such as genetics,<sup>1</sup> first-episode bipolarity,<sup>2</sup> and early life adversities (ELA).<sup>3</sup> However, specifically concerning

**Table 1** Sociodemographic parameters, clinical features, and childhood trauma events of 47 bipolar patients stratified by history of suicide attempt

Variable	Suicide (n=23)	No suicide (n=24)	p-value
Female gender	14 (60.8)	14 (58.3)	0.86
Age	43.1±12.2	39.3±10.6	0.27
Marital status			
Married/living with partner	8 (34.8)	10 (41.6)	
Single/divorced/widowed	15 (65.2)	14 (48.4)	0.63
Educational attainment, years	11.9±4.2	11.3±5.1	0.65
Age at first mood episode, years	26.7±9.6	25.1±8.4	0.52
History of psychiatric hospitalization	15 (65.2)	15 (62.5)	0.85
At least one comorbid diagnosis	14 (60.8)	12 (50.0)	0.45
Alcohol abuse or dependence	9 (39.1)	6 (25.0)	0.30
Physical negligence	7.7±3.4	8.1±4.3	0.71
Emotional negligence	10.3±5.9	9.4±6.2	0.54
Physical abuse	8.9±5.5	7.3±4.6	0.17
Emotional abuse	9.6±5.1	9.0±4.5	0.71
Sexual abuse	11.2±8.2	6.9±5.1	<b>0.03</b>
Total	47.7±22.1	41.0±18.5	0.29

Data presented as n (%) or mean ± standard deviation.

ELA, some controversy persists about what types of adversity would contribute or not to suicidal behavior in patients with BD.<sup>3</sup> Within this context, we conducted a study of all early life stressors (physical and emotional negligence and physical, emotional, and sexual abuse) and their associations with suicide behavior in BD.

We enrolled 47 BD type 1 (BD-I) patients aged 18 to 65 years. All patients lived in Belo Horizonte or neighboring areas and were receiving regular follow-up at the Núcleo de Transtornos Afetivos, Universidade Federal de Minas Gerais (UFMG). Our routine patient assessment protocol is fully detailed elsewhere.<sup>1</sup> Briefly, the diagnosis was established using a structured diagnostic interview (Mini International Neuropsychiatric Interview, MINI-PLUS). We only included BD-I patients in euthymia, defined as a score < 8 in the Young Mania Rating Scale (YMRS) and Hamilton Depression Rating Scale (HAM-D). We also evaluated the frequency, intent, and lethality of suicide attempts, using Beck's Suicide Intent Scale. For the purpose of this study, ELA was assessed using the Childhood Trauma Questionnaire.<sup>4</sup>

The study was approved by the UFMG Research Ethics Committee. Written informed consent was obtained from all participants after a complete description of the study had been provided.

Overall, 23 patients (48.9%) in our sample had a history of at least one previous suicide attempt, with mean frequency of 1.67±0.89, and 24 (51.1%) did not. No significant statistical differences were found concerning socio-demographic and/or clinical characteristics between the suicidal or non-suicidal groups in variables classically associated with suicidal behavior, such as gender and comorbidities (Table 1).

Using the Shapiro-Wilk *W* and Mann-Whitney *U* tests and binary logistic regression, we found that BD-I patients with a lifetime suicide attempt exhibited significantly higher scores for sexual abuse ( $z = -2.093$ ;  $p = 0.036$ ,  $r = -0.31$ ) than BD-I patients without a history of suicide

attempt. However, we failed to find differences in any of the other ELA factors studied (Table 1).

Furthermore, we constructed a logistic regression model with the sexual abuse score. The results showed that sexual abuse contributed significantly to suicidal behavior ( $\chi^2_{(1)} = 4.69$ ,  $df = 1$ ,  $n=47$ ;  $p = 0.03$ ) in this population, accounting for 9.5% (Cox and Snell  $R^2$ ) to 12.7% (Nagelkerke  $R^2$ ) of the variance of the dependent variable. The Exp( $\beta$ ) and confidence interval was 1.102 (95% confidence interval 1.001-1.214).

A large body of evidence is currently available to help explain the link between ELA, particularly sexual abuse, and suicidal behavior (mediated for example by impulsivity and aggressivity), as well the molecular epigenetic mechanisms underlying those behaviors.<sup>5</sup> To our knowledge, this was the first study to assess ELA and suicidal behavior in a Brazilian BD sample. Even considering some limitations (retrospective design and small sample size), our findings reinforce the idea that identifying child sexual abuse in BD patients may help psychiatrists define high-risk groups for suicidal behavior, and highlights the need to address this hidden epidemic.

Dante G. Duarte,<sup>1</sup> Maila de C. Neves,<sup>1</sup>  
Macon R. Albuquerque,<sup>2</sup> Fernando S. Neves,<sup>1</sup>  
Humberto Corrêa<sup>1</sup>

<sup>1</sup>Mental Health Department, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brazil. <sup>2</sup>Physical Education Department, Universidade Federal de Viçosa (UFV), Viçosa, MG, Brazil.

Submitted Nov 24 2014, accepted Jan 25 2015.

### Acknowledgements

This study was supported by grants from Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG).

## Disclosure

The authors report no conflicts of interest.

## References

- 1 Neves FS, Malloy-Diniz LF, Romano-Silva MA, Aguiar GC, de Matos LO, Correa H. Is the serotonin transporter polymorphism (5-HTTLPR) a potential marker for suicidal behavior in bipolar disorder patients? *J Affect Disord.* 2010;125:98-102.
- 2 Neves FS, Malloy-Diniz LF, Barbosa IG, Brasil PM, Corrêa H. Bipolar disorder first episode and suicidal behavior: are there differences according to type of suicide attempt? *Rev Bras Psiquiatr.* 2009;31:114-8.
- 3 Leverich GS, Post RM. Course of bipolar illness after history of childhood trauma. *Lancet.* 2006;367:1040-2.
- 4 Grassi-Oliveira R, Stein LM, Pezzi JC. [Translation and content validation of the Childhood Trauma Questionnaire into Portuguese language]. *Rev Saude Publica.* 2006;40:249-55.
- 5 Labonté B, Turecki G. Epigenetic effects of childhood adversity in the brain and suicide risk. In: Dwivedi Y, editor. *The neurobiological basis of suicide.* Boca Raton: CRC Press; 2012. p.256-84.

# New-onset panic attacks after deep brain stimulation of the nucleus accumbens in a patient with refractory obsessive-compulsive and bipolar disorders: a case report

*Rev Bras Psiquiatr.* 2015;37:182–183  
doi:10.1590/1516-4446-2014-1581

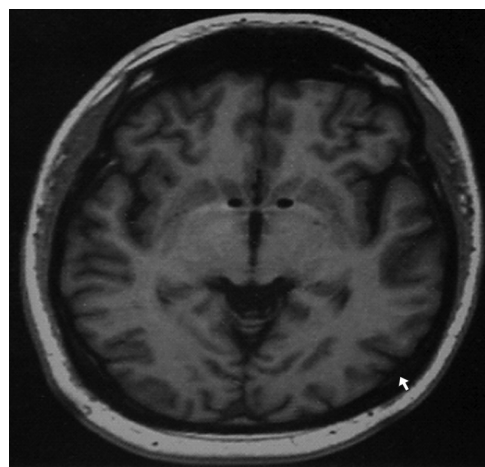
New-onset panic attacks (PA) have been described in patients with obsessive-compulsive disorder (OCD) receiving deep brain stimulation (DBS), mostly during the intraoperative period or a few weeks after device implantation.<sup>1,2</sup> We report the case of a 39-year-old, right-handed man with severe treatment-refractory OCD and bipolar disorder type I (BD-I), beginning at age 17 (without any other psychiatric disorder), who developed late-onset PA after DBS implant placement.

The patient presented with obsessions of doubt, cleaning, and disgusting thoughts accompanied by checking and cleaning compulsions, with an intense need for reassurance and avoidance. Due to poor response to multiple drugs and to cognitive-behavioral therapy (Table 1), the patient underwent surgical evaluation for DBS. Implantation was performed after the patient and relatives had signed an informed consent form and following authorization from the Federal Council of Medicine. At baseline, the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) score was 36<sup>3</sup> and the Beck Depression Inventory (BDI) score was 35.<sup>4</sup>

Bilateral DBS electrodes were inserted through the anterior limb of the internal capsule into the nucleus accumbens (NAcc) near the anterior commissure (Figure 1).

**Table 1** Medications previously taken by the patient

Medication	Maximum dose (mg)	Duration
Clozapine	400	15 years
Fluoxetine	80	14 years
Valproate	2000	3 years
Lithium	1200	16 years
Clomipramine	250	3 years
Sertraline	200	2 years
Paroxetine	80	1 year
Fluvoxamine	300	6 years
Citalopram	60	7 months
Haloperidol	5	6 months
Risperidone	6	3 years



**Figure 1** Magnetic resonance imaging scan showing the deep brain stimulation electrodes (Medtronic model 3387) inserted bilaterally through the anterior limb of the internal capsule into the nucleus accumbens near the anterior commissure. Cartesian coordinates of the distal end of the deepest contact relative to the mid-commissural point were: left and right: 6 mm lateral to midline, 3 mm anterior to mid-commissural point, and in the anterior commissure-posterior commissure plane.

Intraoperative evaluation of the DBS electrodes was carried out using bipolar stimulation at each contact. Pulse width and stimulation frequency ranged from 90 to 210  $\mu$ s and 100 to 180 Hz, respectively. Voltage varied between 0 and 4 V, while bilateral stimulation was 3+/-0-, 3+/-1-, 3+/-2-, and 0+/-3-. The patient did not notice any change in mood or anxiety during stimulation. Testing occurred for approximately 2 to 4 minutes at each contact and the voltage was turned off before testing each contact. The patient was discharged from the hospital with the DBS regulated at 4.2 V, 150  $\mu$ s, 150 Hz both sides, LL 3+, zero and 1 Neg, RR 7+, 4 and 5 Neg. Final adjustment was performed after several trials with on-off checking. Five months after surgery, the patient had experienced significant improvement of both OCD (Y-BOCS = 17) and depression (BDI = 9). Suddenly, within 12 hours of a follow-up visit involving a parameter adjustment for better control of OCD symptoms (4 V, 180  $\mu$ s, 120 Hz both sides, LL C+, zero and 1 [-], RR C+, 4 and 5 [-]), the patient began to have