Disclosures

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**** 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: UFPE = Universidade Federal de Pernambuco.
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Quality of life and depressive symptoms in Parkinson's disease

Qualidade de vida e sintomas depressivos na doença de Parkinson

Dear Editor,

Depression is the most common psychiatric comorbidity in Parkinson's disease (PD) and can affect up to 68.1% of patients with this movement disorder.[1] It is well-known that depression directly affects the quality of life and psychosocial functioning of PD patients. Thus, we have read with great interest the article by Margis et al. in which the authors assessed the influence of depressive symptoms on the quality of life of PD patients.[2] The authors observed that the Geriatric Depression Scale (GDS) score was positively associated with the total score in the World Health Organization Quality of Life Assessment for older adults and five of its six domains.

To the same end as Margis et al.,[2] we have recently used the 39-item Parkinson's Disease Questionnaire (PDQ-39) and its eight dimensions and the 15-item GDS (GDS-15) to assess quality of life and depressive symptoms in PD patients, respectively. We divided the patients into two groups (PD without depression and PD with depression) according to the GDS-15 cutoff score of eight proposed for the screening of depression in PD.[3]

The study was approved by the local ethics committee and the patients gave their informed consent to participate (HCRP nº 10078/2009).

A total of 114 patients (50.9% male) with a mean age of 64.7 years (SD = ±12.6) were enrolled. Most participants (n = 92; 80.7%) had little education (less than 8 years), were not working (n = 109; 95.6%), and were married (n = 65; 57%). One limitation of this study is the absence of further clinical data. In addition, structured clinical interviews (e.g.: SCID-CV) were not applied for the diagnosis of depression. This is also a limitation of the study by Margis et al.[2]

The total score in the PDQ-39 and its subscales/dimensions strongly correlated with the total score in the GDS-15. The group of patients with current depression (GDS-15 ≥ 8) had higher scores ($p < 0.0001$) in the PDQ-39 and its dimensions (Table 1). Therefore, our findings confirm and expand the results found by Margis et al.[2]

Nowadays, special attention has been given to the non-motor symptoms of PD in clinical and research settings. In particular, depressive symptoms have been consistently associated with poor quality of life, and, in some studies, this correlation is stronger than that found for motor symptoms.[4]

The mobility dimension was strongly correlated with depressive symptoms (rho = 0.654) in our study. This is in line with the findings of Margis et al.,[2] in which depression

Table 1 - Correlation scores (Spearman) between the PDQ-39 and its eight dimensions and the GDS-15 in Parkinson's disease (PD) patients with and without depression

	Spearman Correlation with GDS-15 total	PD without depression (GDS-15 < 8)	PD with depression (GDS-15 ≥ 8)	p (Mann-Whitney test)
	Correlation	Mean (SD)		
PDQ-39 total	0.751	37.23 (±17.06)	59.78 (±13.86)	< 0.0001*
Mobility	0.654	48.37 (±29.36)	75.00 (±20.12)	< 0.0001*
ADL	0.515	35.04 (±32.61)	66.26 (±39.61)	< 0.0001*
Emotional well-being	0.607	43.93 (±17.24)	69.62 (±16.91)	< 0.0001*
Stigma	0.407	18.00 (±20.99)	37.90 (±26.61)	< 0.0001*
Social support	0.488	10.74(±15.21)	26.88 (±19.45)	< 0.0001*
Cognition	0.485	43.67 (±17.31)	56.65 (±20.47)	0.004*
Communication	0.641	34.14 (±22,19)	54.84 (±20.84)	< 0.0001*
Bodily discomfort	0.414	37.65 (±18.10)	47.58 (±12.69)	0.016*

*SD: standard deviation; *: statistically significant difference (p < 0.05); GDS-15: Geriatric Depression Scale; PDQ-39: 39-item Parkinson's Disease Questionnaire.*

presented the strongest correlation with the autonomy domain (rho = 0.61).[2] It is interesting to note that this domain was not associated with the Hoehn and Yahr stage or correlated with the motor subscale of the UPDRS. This finding suggests that depressive symptoms in PD could be more related to autonomy than to motor disability.

This is also consistent with the results of another Brazilian study, in which depression was found to be the most consistent determinant of quality of life and was an independent predictor of quality of life.[5]

In conclusion, these data highlight the importance of the recognition and diagnosis of depression in PD in order to implement the appropriate treatment and consequently to improve the quality of life of these patients.

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Long-term mood disorder antedating the diagnosis of Wilson's disease

Transtorno de humor de longa data antecedendo o diagnóstico da doença de Wilson

Dear Editor,

We evaluated a young patient with a long history of psychiatric symptoms and misdiagnosis. After nine years of receiving many ineffective symptomatic therapies, she was diagnosed with advanced Wilson's disease (WD). We would like to present this case in order to raise awareness around the wide clinical spectrum of WD as well as around the need to establishing high clinical suspicion for this diagnosis.

A 17-year-old woman, the daughter of consanguineous parents, was admitted to a university hospital with the diagnosis of cryptogenic cirrhosis. Her clinical history revealed that, since the age of nine, she had been experiencing a series of episodes of excessive fear, anxiety and depression. As her depressive symptoms grew steadily worse, she was put on antidepressants, including amytriptiline and fluoxetine. At the age of 12, she committed two suicide attempts, which were followed by an episode of frank mania with psychotic symptoms, evidenced by her attempt to bury herself up. Between the ages of 12 and 17, she remained on mood stabilizing agents, including carbamazepine and valproic acid. This course of treatment was, however, unsuccessful.

Six months before hospitalization, she experienced weight gain and diffuse abdominal pain, followed by nausea and hyporexia. Ultrasonography and computed tomography (CT) of the abdomen revealed cirrhosis and ascites. Extensive serological studies, including HIV, hepatitis B and C, anti-LKM1, anti-mitochondrial, anti-smooth muscular and anti-nuclear antibodies were unrevealing. When admitted to the hospital, her abdominal pain had worsened and she presented with severe ascites and delirium. Neurological examination showed diffuse hyperreflexia and ankle clonus. Kayser-Fleischer rings were present bilaterally. Further investigation yielded 13 points on the Child-Pugh's classification (severe ascites, stage II encephalopathy, albumin level 2.1, international normalized ratio 2.74, bilirubin levels equal to 4.2). Alpha-fetoprotein at 45.1ng/ml (normal value: < 300ng/ml) and serum ceruloplasmin at 9.0mg/dl (normal value: 15-60mg/dl). Cranial CT showed enlargement of the ventricles and caudate atrophy. She rapidly became hemodynamically unstable, thus making death seemingly inevitable. Upon immediate investigation, family members disclosed that her two brothers had been diagnosed with WD. Her mother, who used fluoxetine on an irregular basis, had been diagnosed with depression and her uncle with schizophrenia.

WD is an autosomal recessive genetic disorder related to the metabolism of copper, which accumulates in several tissues such the brain, liver and cornea. Neurological and psychiatric symptoms may occur due to the presence of such copper deposits in the brain.[1,2]

In nearly 10% of the cases, the first signs of WD may manifest in the form of psychiatric symptoms. Several psychiatric manifestations have been reported.[3] A study with 50 WD patients identified excessive talkativeness, aggressive behavior, loss of interest and abusiveness as the key behavioral changes.[4] Twelve of these patients (24%) fulfilled the diagnostic criteria for a psychiatric condition: nine patients (18%) were diagnosed with bipolar disorder, two (4%) with major depression, and one (2%) with dysthymia. In another study,[5] 11 out of 14 patients with WD had a mood disorder and three presented a schizophreniform-illness.

This case report aims at emphasizing the relevance of considering WD as a possible diagnosis in young patients with psychiatric symptoms, especially in those with a family and past history of jaundice, extrapyramidal features, neuropsychiatric disorder and premature deaths of other siblings. Awareness about the heterogeneity of WD and a high rate of suspicion may have a prognostic implication.

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