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Symptomatic depression after long term steroid treatment: a case report

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Summary

Good results of the treatment of mood disturbances and psychoses induced with steroid administration are in agreement with the fact described in literature of serotonin release reduction caused by steroids and possible relationship between depressive and psychotic manifestations and low serotonin level in cerebrospinal fluid. The patient had no head trauma in the past. He denied any loss of consciousness. The patient at the age of six years had type C virus hepatitis which changed into chronic hepatitis with a slight autoimmune component. He received six months oral steroid (prednisone) treatment in 20 mg daily dose resulting in symptomatic depression. The patient was treated by the author with sertraline from low doses up to 150 mg daily. A remission of the depressive illness and OCD was obtained. The author decided to treat the patient with sertraline in view of its high safety in somatic diseases and good tolerance [1-6].

Keywords: *steroids, symptomatic depression, mianserine, sertraline, major depression.*

Résumé

Des bon résultats du traitement ds perturbations de tempérament et des psychoses induites par l'administration des stéroïdes sont en ordre avec d'autres littérature par la réduction de la production du serotonine et par les relations possibles entre les manifestations dépressives et psychologiques et baisse du niveau de serotonine dans le fluide cérébrospinal. Le patient n'avait de problème cérébral dans le passé. Il refusait toute perte de conscience. A l'âge de 6 ans, ce patient avait le virus de l'hépatite C qui change a l'hépatite chronique avec un peu de composer auto- immunité. Il recevait des stéroïdes orales pendant 6 mois (Prednisone) de 20mg par jour résultant a des dépressions symptomatiques. Le patient était traité par l'auteur avec du sertraline à faible dose de 150mg par jour. A la remission des dépressions et OCD était obtenue. L'auteur admis de traiter le patient avec des doses élevées de sertraline, bien toléré et contrôlé des maladies somatiques.

Introduction

The administration of corticosteroids, particularly those strong-acting, in the treatment of various inflammatory

conditions is frequently associated with the development of mood disturbances and psychoses [7]. Beshay and Pumarega [7] described the case of a 12-year-old boy receiving long term treatment with high prednisone doses for seven years in whom severe depression, irritability, aggressiveness and psychosis developed. In the treatment, sertraline was used [7], without any neuroleptics! Good results of the treatment of mood disturbances and psychoses induced with steroid administration are in agreement with the fact described in literature of serotonin release reduction caused by steroids and possible relationship between depressive and psychotic manifestations and low serotonin level in cerebrospinal fluid.

Therefore, in the described case of the 12-year-old boy, sertraline as a selective [5, 8] central serotonin reuptake inhibitor was used. Besides that, the correctness of decision of the above mentioned authors choosing sertraline for treatment in the 12-year-old boy with mood disorder [7] was confirmed by studies of other authors [4]. Besides that, the author of this paper was evidently encouraged to use sertraline in patient with depressive illness [1, 3-6, 9]. Many authors suggest that sertraline is a drug significantly safer and better tolerated than fluoxetine [1, 10].

Other authors think that sertraline is a drug significantly safer and better tolerated than amitriptyline and imipramine [4, 5, 11-15]. Yet other authors proved that sertraline is significantly safer and better tolerated than nortriptyline [16].

Case report

Male patient Sz.Sz. aged 19 years never received any psychiatric treatment. The patient was born after normal pregnancy and labour. His childhood was very good. Both parents were very considerate, warm, caring, emotional and hard working. At home, the atmosphere was pleasant full of familial warmth and love. The mother was slightly dominant and slightly peremptory. The father was passively subordinate to patient's mother, sometimes rather fearing to express his opinion if it was in opposition to that of patient's mother. Patient's father was scrupulously and effectively concealing from his wife (patient's mother) his homosexual inclination and practices. The father observed the patient but he was convinced that his son (the patient) was a typical heterosexual which has been confirmed by detailed psychiatric examination by the author. Patient's father refused to treat his homosexual inclination. The

patient has a one-year older sister with whom he has a normal emotional contact. No mental illness occurred in the family. Both parents of the patient are alive. In primary school he achieved rather poor results. Presently he has been attending secondary school where he learns definitely badly and repeats years. The IQ of the patient according to Wechsler scale is 74. The cause of his poor results in learning is not laziness or low intelligence quotient but constant obsessional thoughts that make learning very difficult. The patient had no head trauma in the past. He denied any loss of consciousness. The patient at the age of six years had type C virus hepatitis which changed into chronic hepatitis with a slight autoimmune component. He received long term oral steroid (prednisone) treatment for six months in 20 mg daily dose resulting after four months in symptomatic depression. The thyroid status of the patient was investigated and there was no incorrectness. The depression was successfully treated by the author of this paper with mianserin in oral 30 mg daily dose. After six weeks of treatment with the mianserin he had a relapsed of the depressive illness. Formal and emotional contact with the patient was good. His mood was depressed in a medium degree. Normal stream of thinking. He used to sleep well during night. His appetite was normal. Variable depressive delusions of worthlessness, guilt, regressing after gentle persuasion by the author. Circadian mood changes were absent. Slightly marked depersonalization and derealization of depressive type. He had constant obsessional thoughts and hypochondriac ruminations about his hepatitis. Great reluctance to any activity was present. Slight psychomotor sluggishness was observed. The patient lost 7 kg body weight during two months. Detailed psychiatric examination excluded psychosis and confirmed a typical phase of major depression. The diagnosis was confirmed by Hamilton scale, Montgomery-Asberg scale and Beck Depression Self-Assessment Inventory. The tests diagnosed the depression as medium (as the criteria of depression intensity, minor, medium and severe depressions were taken into account).

- Hamilton scale – 56 points (scale: 0 – 80)
- Montgomery-Asberg scale – 49 points (scale 0 – 70)
- Beck Depression Self-Assessment Inventory – 48 points (scale 0 – 63)

The results obtained after treatment:

- Hamilton scale – 12 points (scale: 0 – 80)
- Montgomery-Asberg scale – 9 points (scale 0 – 70)
- Beck Depression Self-Assessment Inventory – 10 points (scale 0 – 63)

Laboratory tests:

- basic laboratory blood and urine analyses gave normal results (before treatment by the author, the results of liver function tests were significantly exceeding the normal values:

- transaminases (AspAT, AlAT)
- bilirubin
- thymol test
- alkaline phosphatase
- chest radiogram was normal
- ECG record was normal
- successive EEG records were normal
- eye fundus examination gave normal result
- neurological examination: without focal and meningeal manifestations
- physical examination: normal

The patient was treated by the author with sertraline for three months from low doses up to 150 mg daily. A remission was obtained of depression and obsessive-compulsive disorders.

Discussion

The author decided to treat the patient with sertraline in view of its high safety in depressive illness and good tolerance [1, 2, 3, 4, 5, 6]. The main problem here was depressive illness. In the patient, in the course of depression obsessive-compulsive manifestations significantly predominated. Sertraline, according to many authors [8, 17-20] is effective in the above mentioned doses. Obsessive-compulsive symptoms (obsessive thoughts and ruminations) significantly decreased concentration which made learning very difficult for the patient. After entering into remission the patient started to achieve good results at school which additionally improved his mood. Owing to good results in learning, nagging and impudent querulousness of the mother stopped and this improved also the patient's mood. The initial symptomatic (steroid-induced) depression rapidly regressed not only owing to mianserin administration but because steroid treatment could have been gradually withdrawn. The author treating the patient with sertraline for three months, particularly frequently monitored his liver function.

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