Challenges in the treatment of corticosteroid induced bipolar disorder in a patient with myasthenia gravis

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BACKGROUND

Myasthenia gravis (MG) is a chronic, autoimmune disorder of the neuromuscular junctions. As it is frequently accompanied by psychiatric comorbidities including affective disorders, diagnosis and treatment can be complicated in several ways. First, symptoms of MG and psychiatric disorders can be similar and mimic one another. Second, MG-treatment includes corticosteroids which can lead to worsening of psychiatric symptoms. Third, due to the complexity of MG, patients are more susceptible to different adverse effects of medications, especially the ones used in the treatment of psychiatric symptoms, e.g. benzodiazepines, antipsychotics and antidepressants. Our aim was to present treatment possibilities in MG with bipolar disorder.

CASE REPORT

A 48-year-old female patient was admitted to a psychiatric hospital in Croatia due to symptoms of severe depression including insomnia, loss of appetite, abulia, avolition, loss of energy, concentration problems and anxiety. Although she negated suicidal ideas, she was feeling hopeless and did not see a way out of her situation. Anxiety, negative anticipations of the future and depressive ideas were reaching a psychotic level. According to her medical documentation, anamnestic and heteroanamnestic data, she was diagnosed with MG in 2013 and was currently treated with corticosteroids and antagonist of acetylcholinesterase. During the last couple of months her mood oscillated from euphoria to depression, while her behaviour was disorganised, ranging from excessive money spending to complete neglect of care for herself and household, both leading to complete dysfunctionality. Taking into account both manic and depressive symptoms, as well as her somatic illness and treatment, she was diagnosed with corticosteroid induced bipolar disorder. Multidisciplinary treatment plan including reduction of corticosteroid doses and prescription of antipsychotic, antidepressant and anxiolytic was made.

CORTICOSTEROID ADVERSE EFFECTS

TREATMENT OF CORTICOSTEROID ADVERSE-EFFECTS

Lowering the dose or treatment discontinuation
Mood stabilizers (lithium, valproate, carbamazepine)
Atypical antipsychotics (quetiapine, risperidone)
Antidepressants: SSRI

MS AND PSYCHOTROPIC MEDICATION

Antidepressants	
Recommended (relatively safe)	Avoid
citalopram, fluoxetine, duloxetine	tricyclic antidepressants
Antipsychotics	
Recommended (relatively safe)	Avoid
haloperidol, amisulpirid, paliperidone, aripiprazole, olanzapine*, quetiapine*	chlorpromazine, clozapine, loxapine, promazine, zuclopenthixol
Benzodiazepines	
Recommended (relatively safe)	Avoid
oxazepam, lorazepam, brotizolam	diazepam, clonazepam
Mood stabilizers	
Recommended (relatively safe)	Avoid
valproic acid, topiramate	lithium, carbamazepine

*drugs with anticholinergic effect should be carefully monitored

CONCLUSIONS

In complex clinical presentation like this, multidisciplinary approach and literature review are essential for adequate treatment. Correction of corticosteroid doses and appropriate psychopharmacotherapy (aripiprazole, duloxetine, oxazepam) led to clinical improvement in our patient.

References: Warrington TP1, Bostwick JM. Psychiatric adverse effects of corticosteroids. Mayo Clin Proc. 2006 Oct;81(10):1361-7. / Yasir M, Sonthalia S. Corticosteroid Adverse Effects. Treasure Island (FL): StatPearls Publishing; 2019 Jan. / She S, Yi W, Zhang B, 2017. Worsening of Myasthenia Gravis After Administration of Antipsychotics for Treatment of Schizophrenia, A Case Report and Review of Literature. 2017. Journal of Clinical Psychopharmacology, 37.