A CASE OF NEUROLEPTIC MALIGNANT SYNDROME: A NEUROLOGIC EMERGENCY DUE TO PSYCHOTROPIC DRUGS

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Background & Aims

Neuroleptic Malignant Syndrome (NMS) is an infrequent yet life threatening condition characterised by delirium, altered mental status, muscular rigidity, fever and autonomic nervous system dysregulation.

This condition is associated with the use of dopamine receptor-antagonist therapeutic agents or the rapid withdrawal of dopaminergic medications. The incidence of this iatrogenic ailment has decreased partly due to the discovery of the second generation antipsychotics (non-conventional or atypical).

Once symptoms occur, progression can be rapid and reach peak intensity in as little as three days, generally developing NMS within hours or days after exposure, with most exhibiting symptoms within two weeks and nearly all within 30 days.

Our goal is to present a scientific poster discussing one case of NMS in an outpatient with Residual Schizophrenia (RS).

Material & Methods

Case report. Bibliographic research was conducted using the search engine Pubmed® and the keywords: “Neuroleptic Malignant Syndrome”.

Results

Male, 37 years old

Outpatient with diagnosis of **Residual Schizophrenia**

Treatment scheme: Haloperidol Decanoate IM 300mg/monthly + Aripiprazole 30mg/day + Clozapine 600mg/day + Sodium Valproate 1000 mg/day

Monthly visit by community psychiatry team. Administration of **300mg Haloperidol Decanoate IM**.

Reports of clinical instability previously to the visit.

5 DAYS LATER...

Admission to the emergency room

- altered mental status
- fever
- muscle rigidity
- diaphoresis

No evidence of alcohol and drug abuse.

Exclusion of Central Nervous System infection.

NEUROLEPTIC MALIGNANT SYNDROME

due to psychotropic toxicity

12 days stay at the Intensive Care Unit

Clinically:

Subacute delirium with consciousness fluctuability. Generalized muscular rigidity. Hyperhidrosis. Analytically, increase of the CK plasma levels.

10 days stay at the Internal Medicine service.

Transferred to the Psychiatry department - 65 days stay.

Residual auditory and visual hallucinations and persecutory delusions.

Very precautionous reintroduction of Clozapine, titration until 100mg.

Good tolerability and medical discharge.

First appointment 1 month after medical discharge.

Delusions present. Still on 100mg of Clozapine/day.

Plan to titrate Clozapine to 200mg/day.

Patient revealed that in the days previous to the visit of the community psychiatry team he had been overdosing prescribed medications.

Conclusions

When early recognised, NMS is usually not fatal and the majority of the patients will recover completely between 2 to 14 days. Treatment is individualised and based on the clinical presentation. The first step implies cessation of the offending psychotropic agent. In most cases, besides hyperthermia management, conservative treatment including aggressive hydration and metabolic abnormalities correction is recommended. Some scholars suggest specific pharmacological treatment. Recurrence do occur, hence the importance of precautionous reintroduction of anti-psychotic treatment.

Bibliography

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