



ORIGINAL RESEARCH PAPER

Medicine

DIAGNOSED CASE OF NEUROLEPTIC MALIGNANT SYNDROME

KEY WORDS: Neuroleptic Malignant syndrome, hyperpyrexia, rigidity, dysautonomia.

Dr. Lokesh Shantaram Pangavhane

Junior Resident, General Medicine Dr. D.Y. Patil Hospital and Medical College, Nerul, Navi Mumbai.

Dr. Nivedita Moulick

Professor, General Medicine, Dr. D.Y. Patil Hospital and Medical College, Nerul, Navi Mumbai.

Dr. Bindukumar Patel KT

Junior Resident, General Medicine Dr. D.Y. Patil Hospital and Medical College, Nerul, Navi Mumbai.

Dr. Jay Bhadja

Junior Resident, General Medicine Dr. D.Y. Patil Hospital and Medical College, Nerul, Navi Mumbai.

INTRODUCTION

Neuroleptic Malignant Syndrome is a life threatening neurologic emergency associated with use of antipsychotic agents and characterized by a distinctive clinical syndrome of mental status change, rigidity, fever, dysautonomia.

Incidence rates for NMS range from 0.02 to 3 percent among patients taking antipsychotic agents.

NMS described in all age groups, age is not a risk factor. Male outnumbered female, both age and sex distributions correspond with the distribution of the exposure to antipsychotic agents.

Central receptor dopamine blockade is the most accepted theory as it explains the signs and symptoms of NMS.

NMS is most often seen with high potency first generation antipsychotics agents and also seen in sudden withdrawal of dopamine agonist like L-dopa and infection, surgery, dehydration are precipitating factors.

CASE STUDY

59yr old female, came with complaints of Fever and Altered mental status since 3 days.

Patient was known case of Parkinsonism and Schizophrenia. For which she was on Tab. Olanzapine and Tab. Levodopa since 1 year.

On further enquiry relatives gives history of stoppage of Tab. Levodopa since 10 days.

On examination:-

Patient was conscious but not oriented to time, place or person.

Temp- 106F Pulse-110bpm BP-170/100mmhg

GCS-E4V4M5

Hypertonia, rigidity and Hyperreflexia was present.

Bilateral plantars were equivocal.

Resting tremors were present.

Neck rigidity- Absent.

Patient also had autonomic involvement in the form of fluctuating blood pressure.

Patient had constantly raised body temperature not relieved on antipyretics.

Investigations:-

Total CPK-814, LDH-685, Creatinine-1.47 all three tests were raised.

MRI brain was suggestive of chronic ischemic changes.

CSF study- NAD.

All the signs, symptoms and investigations points towards the diagnosis of Neuroleptic malignant syndrome.

Treatment:-

Tab Bromocriptine (Dopamine receptor agonist).

Tab Baclofen for muscle rigidity.

RT cold saline wash along with antipyretics for hyperpyrexia.

Anticholinergics for extrapyramidal symptoms.

CONCLUSIONS

Neuroleptic malignant syndrome is an emergency condition should be diagnosed and treated at earliest as the mortality is around 10-20%. NMS is mostly clinical diagnosis based on the history and clinical signs. CPK will be raised in NMS and CPK levels indicate severity and prognosis.

In this case abrupt stoppage of dopamine agonist may be the cause of NMS more than using antipsychotic agents.

NMS if not treated at earliest may lead to electrolyte abnormalities and myoglobinuric acute renal failure due to rhabdomyolysis.

In NMS mostly MRI and CT brain imaging and Lumbar puncture analysis will be normal. EEG may show generalized slow wave activity.

Most severe complication of NMS is cardiac arrhythmias, including torsades de pointes and cardiac arrest, aspiration pneumonia, respiratory failure, seizures, myocardial infarction.

REFERENCES

1. 2023UpToDate, Inc. and/or its affiliates. All Rights reserved.
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