

Short Report

Sudden Withdrawal or Introduction of Drugs and their Clinical Consequences

TANVEER HASSAN BANDAY,¹ SADAF BASHIR¹

Introduction

In 1968 Delay, was first to describe Neuroleptic malignant syndrome (NMS). The incidence of NMS varies from 0.24–2.2%.¹ NMS is a rare but potentially life threatening syndrome commonly seen with high potency typical neuroleptic agents like haloperidol.² However, it has been seen in the low potency drugs like chlorpromazine including newer atypical antipsychotic drugs (olanzapine). Sudden withdrawal, as well as, dose reductions of Levodopa therapy can also result NMS.^{3,4} Surgery/infections or both, can also possibly precipitate NMS.⁵ Symptoms in NMS include high grade fever or hyperthermia, muscle rigidity, involuntary movements, altered mental status, tremors. Autonomic dysfunction such as incontinence, tachycardia, tachypnea & profuse sweating can also be seen.^{1,2,6} Complications of NMS include Rhabdomyolysis, hypotension, renal failure and death. While symptoms usually develop during the first two weeks of neuroleptic therapy. A single dose or treatment with the same dose, with the same drug, for many years can result in NMS.^{6,7} Elevation of creatinine phosphokinase, myoglobinuria, and increased in leucocyte count are commonly seen laboratory findings.²

Keywords: Neuroleptic malignant syndrome; quitapine; levadopa; small bowel obstruction.

Case Report

We report a case of 68 years old male admitted with complaints of severe abdominal pain & was diagnosed to have sub-acute intestinal obstruction after investigations. Patient had significant past history of diabetes, hypertension, Parkinson disease & ischemic heart disease and had undergone CABG. Our initial workup included X-ray abdomen erect which showed dilatation of bowel with few small air fluid levels. CECT Abdomen was done showed multiple dilated fluid filled small bowel loops predominantly involving the proximal jejunal loops short segment structure (2cm) in the distal jejunal bowel loops which confirmed small bowel intestinal obstruction (fig 1).

1. Department of medicine, AIMS, Bangalore, India.

Correspondence: Tanveer Hasasan Banday. Assistant Professor, department of Medicine, AIMS, Bangalore, India. E-mail: drtanveerbanday90@gmail.com.



Fig.-1: CECT Abdomen showing multiple dilated fluid filled small bowel loop & a dilated stomach.

Surgical, Gastroenterology & Cardiology opinion was taken. However, in view of co-morbidities & positive troponin-I, surgery was deferred & was advised to manage conservatively with medical management. Patient had bowel movements after 1 day of admission. Patient also with acute kidney injury & electrolyte imbalance for which Nephrology opinion was taken & was regularly followed up. Both hyponatremia, hypokalemia and renal functions improved, but Patient on 7th day of admission developed altered sensorium, change in mental status, for which psychiatry & neurology opinions were taken & patient was regularly followed up for the same. Initial differential diagnosis includes acute psychosis, and patient was put on quetiapine 25mg, but his condition did not improve and dose of drug was doubled. Also in view of small bowel obstruction patient was kept nil per oral, so antiparkinsonian medication levodopa was withheld. Patient developed high grade fever maximum recorded was 106.8 F, with muscle rigidity, worsening of sensorium, profuse sweating, elevation of serum creatinine kinase (CK=1678). Despite of aggressive

treatment patient died within next 36 hours due to neuroleptic malignant syndrome.

Conclusion

Our paper tries to emphasize that introduction and/or, sudden stoppage of drugs should be done very cautiously as consequences can be devastating. We also want highlight that in all surgical cases, complete Nil per oral is not be always necessary, as sudden stoppage/introduction of a new drugs which are not though life saving (e.g. Levadopa) could add to the risks of morbidity and mortality of primary disease as was seen in our case.

Conflict of Interest: None

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