Neuroleptic malignant syndrome

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OBJECTIVES: Neuroleptic malignant syndrome (NMS) is a potentially fatal disease composed of hyperthermia, extrapyramidal symptoms, autonomic nervous system disturbances, and altered levels of consciousness. Although the cause is still uncertain, most studies suggest it is the result of dopaminergic deficiency in the central nervous system, most commonly caused by neuroleptic medications. Similar symptoms and clinical pictures can be seen as a result of acute withdrawal of Parkinson's disease treatment. In this case we aimed to draw attention to neuroleptic malignant syndrome, encountered rarely in the emergency department but highly mortal.

CASE: 73 years old female patient was admitted to the emergency department with complaints of consciousness and fever. In the story we learned that two days ago he withdrawn his drug Stalevo (levodopa, carbidopa and entacapone, Novartis, Turkey) which is for his Parkinson's disease and since yesterday, he has fire and confusion. Patient has in history Parkinson's disease, dementia, anxiety disorders. On physical examination, the general condition was bad, tachypnea, tachycardia and sweating were present. Blood pressure 90/60 mmHg, body temperature: 38.4, heart rate: 110/min, respiratory rate: 28, GCS: 9. The patient's neurological examination was lethargic consciousness, cooperative, and not oriented. Both of the wrist and left lower extremities was rigidity. Laboratory tests: hemoglobin: 6.8g/dl, Leukocytes 14,500 / pl, CRP 61 g / dl, blood glucose:192 mg / dl, urea 172.9 mg / dl, creatinine 2.08 mg / dl, sodium 148 mmol / L, potassium 4.28 mmol / L, AST: 102 u / l, ALT: 311 u / l, CPK: 5097 u / l, CK-MB 689 u / l. ABG: pH 7.41 PCO2: 38.2 mmHg PO2: 25.4 mmHg SO2: 64.3%, BE: -1 mmol / l. The patient was given iv paracetamol and peripheral cooling. The patient was admitted to the neurology intensive care with a diagnosis of neuroleptic malignant syndrome. Stalevo 100 mg was began. Infectious diseases advised Meronem 2 ×1. Dantrolene sodium was planned, but in our country there is no. bromocriptine (Parlodel, Novartis, Turkey) 3 × 5 mg and 10mg diazepam 1×1 for agitation was started but the patient died the next day after.

CONCLUSION: Neuroleptic malignant syndrome is rare and lethal, early diagnosis and prompt treatment is important to reduce mortality. The patients who is using antipsychotics, patients and their relatives to be informed of possible side effects is useful. It would be useful to be followed this patients in intensive care units continuous monitoring and respiratory support may be awarded.

Keywords: Neuroleptic malignant syndrome, emergency medicine, consciousness