

CONTROVERSIES RELATED TO NEUROLEPTIC MALIGNANT SYNDROME

B. Margetić & B. Aukst-Margetić

Neuropsychiatric hospital “Dr Ivan Barbot” Popovača, Croatia

E-mail: branimir.margetic@zg.t-com.hr

Neuroleptic malignant syndrome (NMS) is an uncommon but one of the most serious and lifethreatening side effects produced by antipsychotic medications. The syndrome is characterized by severe rigidity, tremor, fever, altered mental status, autonomic dysfunction, and elevated serum creatinine phosphokinase and white blood cell count.

The literature on NMS is rather extensive, but many aspects related to the syndrome remain controversial. These controversies are related to the nature of this drug reaction, different diagnostic criteria, incidence, pathophysiology, differential diagnosis and treatment. Although, by definition idiosyncratic drug reactions cannot be explained on the basis of the pharmacology of the drug, NMS is often defined as an idiosyncratic drug reaction exclusively associated with the use of neuroleptics. Although many diagnostic criteria have been used, there is no single set of criteria that is unisonly accepted. Estimates of the incidence of NMS once ran as high as 3%, but more recent data suggest that incidence has decreased to 0.01% or 0.02%. It has been suggested that such decrease could be consequence of different factors such as increased awareness of the disorder, earlier recognition and intervention, and the shift to use of atypical antipsychotics. Yet, earlier recognitions and interventions are not usually related the decrease of incidence. It is usually considered that central neuroleptic-induced dopamine blockade plays a major role in NMS. Due to others, the key factor in development of NMS is a dysfunction of the sympathetic nervous system. A very large number of conditions that are presented with fever or rigidity should be considered in the differential diagnosis of NMS. Yet, the most controversies are related to distinguishing between serotonin syndrome (SS), malignant catatonia (MC) and NMS that might have practically identical clinical presentation.

Our aim is to emphasize the importance of some of these controversies in usual clinical practice.