Neuroleptic Malignant Syndrome

Nurses have a responsibility to patients to provide competent, effective, and safe medical care. Health promotion and symptom management are priorities in the care of our patients. When providing health care for mentally ill patients taking psychotropic medications, nothing could be more important than monitoring for side effects of the medications, especially Neuroleptic Malignant Syndrome (NMS).

According to Keogh and Doyle (2008), NMS is a potentially life-threatening, but relatively rare, idiosyncratic reaction to neuroleptic medications. The nurse should be aware of the severity of NMS and know the signs and symptoms. In NMS, severe muscle rigidity develops with elevated temperature and a rapidly accelerating cascade of symptoms (occurring during the next 48 to 72 hours), which can include two or more of the following: hypertension, tachycardia, tachypnea, prominent diaphoresis, incontinence, mutism, leukocytosis, changes in level of consciousness ranging from confusion to coma, and laboratory evidence of muscle injury (e. g. elevated creatinine phosphokinase) (Boyd, 2008). If the nurse observes these signs and symptoms the nurse must take immediate action as this is a medical emergency and life-saving measures should be put into place.

The most important aspects of nursing care of patients with NMS relate to recognizing symptoms early, holding any antipsychotic (any dopamine-blocking agent) medications, and initiating supportive nursing care (Boyd, 2008). Pharmacological interventions include the possible use of a dopamine agonist such as bromocriptine to increase the production of dopamine and/or a muscle relaxant such as dantrolene, in conjunction with this, antipyretics such as paracetamol can be given to reduce fever if indicated (Keogh & Doyle, 2008). This would imply that if a patient is seen on an outpatient basis presents with these symptoms, then the patient would need to be immediately placed inpatient for treatment.

The nurse must be educated about NMS and be prepared to administer life-saving measures to care for patients taking psychotropic medications. The nurse should also take a thorough health history which includes prior reactions to any and all medications that would indicate previous NMS. Where possible, clients with a history of NMS should not be given antipsychotic therapy again and should instead be prescribed alternative medications such as lithium, carbamazepine, or benzodiazepines (Keogh & Doyle, 2008). Through education, thorough health histories, and vigilant nursing precautions, nurses can help reduce the potentially lethal complications of NMS.