

Acute Dystonic Reaction Assessment and Care

Introduction

Antipsychotic medications, which can be effective in reducing or eliminating such symptoms as delusions, hallucinations, and disorganized thinking, work by blocking dopamine receptors in the brain. However, this blockage can also cause extrapyramidal symptoms such as acute dystonia (abnormal movements or muscle tone).

Dystonia causes pain and can quickly become a medical emergency for the patient. It can occur after a single dose of an antipsychotic medication or days after initiating antipsychotic treatment. Various muscle groups are associated with acute dystonia; however, the tongue, face, throat, eyes, and jaw are most commonly affected. (*See Signs and symptoms of dystonia.*)

SIGNS AND SYMPTOMS OF DYSTONIA

Signs and symptoms of acute dystonia vary, depending on the affected muscles. Keep an eye out for these characteristic findings.

1. **Laryngeal dystonia:** Spasms of pharyngeal and laryngeal muscles can cause hoarseness to the voice and a thick, stiff tongue, leading to a potential airway obstruction.
2. **Oculogyric crisis:** Spasms of the extra-ocular eye muscles force the eyes upward into a lateral gaze.
3. **Opisthotonus:** Spasms of all paravertebral muscles force the trunk and neck into hyperextension.
4. **Retrocollis:** Spasms of the paravertebral neck muscles force the neck into hyperextension.
5. **Torticollis:** Spasms of the lateral neck muscles cause twisting from side to side.

Treatment of acute dystonia involves discontinuing the causative antipsychotic medication. The condition can usually be reversed by administering antiparkinson or anticholinergic medications, starting with a parenteral dose and followed by oral medication for 2 to 3 days to prevent reoccurrence. Nursing care includes staying with patient, taking him to a quiet area, providing reassurance, and administering medication.

Equipment

- Medications as ordered
- Needleless injection device, if available, or needle and syringe
- Alcohol pads

Implementation

- Review the patient's medical record for his medication history, including the use of antipsychotics, decongestants, antihistamines, anticonvulsants, and selective serotonin reuptake inhibitors.

- Determine whether the doctor has ordered an antiparkinson or anticholinergic medication.
- Confirm the patient's identity using two patient identifiers according to your facility's policy.³
- Ask the patient if he has ever experienced extrapyramidal symptoms.
- Assess the patient frequently for the early signs of acute dystonia, including abnormal positioning of the head and neck in relation to the body; muscle spasms; impaired swallowing, speaking, or breathing; thickened or slurred speech; tongue protrusion or dysfunction; eyes deviated up, down, or sideways; and abnormal positioning of the limbs or trunk.
- Assess the patient for pain or cramps in the affected muscles, which are common in patients with dystonia.
- Administer medications as ordered at the first sign of an adverse reaction.
- Contact the patient's doctor if the patient doesn't have the appropriate medication orders or for additional orders, as needed.
- Discontinue the causative medication as ordered.
- Take the patient to a quiet area and remain with him.
- Reassure the patient that the symptoms are temporary and will subside.
- Administer oral medications, as ordered, for 2 to 3 days after the reaction.
- Continue to monitor the patient *to ensure that he doesn't have a reoccurrence of the symptoms*.
- Document the procedure.⁴

Special Considerations

- Be aware that an increase in fear or anxiety in a patient who's receiving antipsychotic medications may be the patient's response to the initial symptoms of dystonia.

Patient Teaching

Inform the patient of the potential adverse effects of all of his medications. If possible, provide written instructions or a medication handout. Advise the patient to report unusual symptoms to the doctor immediately. Encourage the patient to maintain his medication regimen as ordered, and tell him not to discontinue medication without consulting his doctor. Include the patient's family or significant other in the teaching as applicable.

Complications

Serious complications include tardive dyskinesia or neuroleptic malignant syndrome. Early detection of dystonic reactions will minimize such complications.

Documentation

Document the patient's symptoms, the actions taken, notification of the doctor and his orders, nursing care provided, and evaluation of treatment. Also record any patient teaching provided and the patient's response.

References

1. American Psychiatric Association. (2006, June). "Practice Guideline for the Psychiatric Evaluation of Adults, 2nd ed." [Online]. Accessed January 2010 via the Web at http://www.psychiatryonline.com/pracGuide/loadGuidelinePdf.aspx?file=PsychEval2ePG_04-28-06.
2. Courey, T. "Detection, Prevention, and Management of Extrapramidal Symptoms," *Journal for Nurse Practitioners* 3(7):464-69, July-August 2007.
3. The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: The Official Handbook*. Standard NPSG.01.01.01. Oakbrook Terrace, Il.: The Joint Commission, 2010.
4. The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: The Official Handbook*. Standard RC.01.03.01. Oakbrook Terrace, Il.: The Joint Commission, 2010.
5. Mohr, W.K. *Psychiatric-Mental Health Nursing: Evidence-Based Concepts, Skills, and Practices*, 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2008.
6. Nettina, S.M. *Lippincott Manual of Nursing Practice*, 9th ed. Philadelphia: Lippincott Williams & Wilkins, 2010.
7. Varcarolis, E.M., et al. *Foundations of Psychiatric Mental Health Nursing: A Clinical Approach*, 5th ed. St. Louis: Saunders, 2006.
8. Videbeck, S.L. *Psychiatric-Mental Health Nursing*, 4th ed. Philadelphia: Lippincott Williams & Wilkins, 2007.

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