Protocol

Treatment of Status Asthmaticus with Epinephrine

Status asthmaticus is a severe asthma attack that does not respond to the usual therapies. Although reversible, it is a life-threatening issue, because it can lead to respiratory failure and cardiac arrest. Status asthmaticus requires immediate treatment.

Status asthmaticus is caused by severe bronchospasm, in which the smooth muscles of the bronchi suddenly contract and narrow the airways. The symptoms include extreme difficulty with breathing, which causes restlessness and anxiety. Although coughing and wheezing are common symptoms of asthma, a child with status asthmaticus may not cough or wheeze because there is not enough airflow. Advanced symptoms include little or no breath sounds, inability to speak, bluish tinge to the skin (cyanosis), and heavy sweating. If left untreated, status asthmaticus can lead to unconsciousness and cardiopulmonary arrest.

It is within the scope of practice of a licensed registered nurse in North Carolina to recognize the signs and symptoms of status asthmaticus and to administer epinephrine when clinically indicated. Epinephrine may be administered using an approved intranasal spray device or an epinephrine auto-injector, in accordance with established nursing procedures, the prescriber's order, and the manufacturer's instructions for use. All school nurses will have epinephrine available for use in the schools.

Management Guidelines for Treating Status Asthmaticus in the schools:

1. In the event of an asthma episode by student, staff member or visitor to the school, the school nurse will:
    A. Obtain a history of asthma
    B. Move patient to a quiet area if possible.
    C. Administer fast acting inhaler, such as Albuterol, if available.
    D. Offer cool water and observe patient for improvement or worsening condition.
    E. Contact or have another staff member contact parent/guardian, or emergency contact to inform of above.

2. If an asthma episode progresses to the point of status asthmaticus, the school nurse will:
    A. Administer epinephrine according to the following approved procedure.
    B. Call 911 or have another staff member do so for immediate transport to an emergency room.
    C. Inform parent/guardian/emergency contact of emergent condition.

Prescribed Dosages for Epinephrine:
Auto-Injector Formulations
a) Epinephrine 0.3 mg via auto-injector for individuals weighing 66 pounds or greater.
b) Epinephrine 0.15 mg via auto-injector for individuals weighing 33–66 pounds

Intranasal Formulations
c) Epinephrine 2 mg via intranasal spray for individuals weighing 66 pounds or greater.
d) Epinephrine 1 mg via intranasal spray for individuals weighing 33–66 pounds

The school nurse will select and administer the appropriate dosage and route of epinephrine administration based on the individual's weight and the available product.

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Date

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