

Planning/Goals

The client will:

- Experience relief of symptoms
- Take antihistamines accurately
- Avoid hazardous activities if sedated from antihistamines
- Avoid preventable adverse drug effects
- Avoid taking sedative-type antihistamines with alcohol or other sedative drugs

Interventions

- For clients with known allergies, assist in identifying and avoiding precipitating factors when possible. If it is a drug allergy, encourage the client to carry a medical alert device that identifies the drug.
- Monitor the client closely for excessive drowsiness during the first few days of therapy with antihistamines known to cause sedation.
- Encourage a fluid intake of 2000 to 3000 mL daily, if not contraindicated.
- Because antihistamines are most effective before exposure to the stimulus that causes histamine release, assist clients in learning when to take the drugs (eg, during seasons of high pollen and mold counts).
- When indicated, obtain an order and administer an antihistamine before situations known to elicit allergic reactions (eg, blood transfusions, diagnostic tests that involve contrast media).
- For clients who have experienced an allergic or pseudo-allergic drug reaction, assist them in learning about the drug thought responsible (including the generic and commonly used trade names), suitable alternatives for future drug therapy, and potential sources of the drug.

Evaluation

- Observe for relief of symptoms.
- Interview and observe for correct drug usage.
- Interview and observe for excessive drowsiness.

PRINCIPLES OF THERAPY

Prevention of Histamine-Releasing Reactions

When possible, avoiding exposure to known allergens can prevent allergic reactions. If antihistamine therapy is required, it is more effective if started before exposure to allergens because the drugs can then occupy receptor sites before histamine is released.

Drug Selection and Usage

- Choosing an antihistamine is based on the desired effect, duration of action, adverse effects, and other character-

istics of available drugs. For most people, a second-generation drug is the first drug of choice. However, they are quite expensive. If costs are prohibitive for a client, a first-generation drug may be used with minimal daytime sedation if taken at bedtime or in low initial doses, with gradual increases over a week or two. Azelastine nasal spray also causes little sedation, but it leaves an unpleasant taste. Overall, safety should be the determining factor. Some studies have shown cognitive and performance impairment with the first-generation drugs even when the person does not feel drowsy or impaired.

- For treatment of acute allergic reactions, a rapid-acting agent of short duration is preferred.
- For chronic allergic symptoms (eg, allergic rhinitis), long-acting preparations provide more consistent relief. A client may respond better to one antihistamine than to another. Thus, if one does not relieve symptoms or produces excessive sedation, another may be effective.
- For treatment of the common cold, studies have demonstrated that antihistamines do not relieve symptoms and are not recommended. However, an antihistamine is often included in prescription and OTC combination products for the common cold.

Use in Children

First-generation antihistamines (eg, diphenhydramine) may cause drowsiness and decreased mental alertness in children as in adults. Young children may experience paradoxical excitement. These reactions may occur with therapeutic dosages. In overdosage, hallucinations, convulsions, and death may occur. Close supervision and appropriate dosages are required for safe drug usage in children.

Diphenhydramine is not recommended for use in newborn infants (premature or full-term) or children with chickenpox or a flu-like infection. When used in young children, doses should be small because of drug effects on the brain and nervous system. **Promethazine** should not be used in children with hepatic disease, Reye's syndrome, a history of sleep apnea, or a family history of sudden infant death syndrome.

The second-generation drugs vary in recommendations for use according to age groups. **Cetirizine** and **loratadine** may be used in children 2 years and older. Syrup formulations are available for use in younger children. **Azelastine** may be used in children 5 years and older; **fexofenadine** may be used in children 6 years of age and older; and **desloratadine** may be used in children 12 years and older.

Use in Older Adults

First-generation antihistamines (eg, **diphenhydramine**) may cause confusion (with impaired thinking, judgment, and memory), dizziness, hypotension, sedation, syncope,