Bullet Point Nursing

Pulmonology pharmacology (OTC)

Disclaimer: These notes are designed to provide the key points of each topic and may not contain all necessary information. Every effort is made to ensure this content is up to date and accurate at the time of writing. No liability is assumed for the content or its relation to current standards and practices. This should not replace comprehensive nursing educational resources.

Upper respiratory pathophysiology review

- The primary mediator of allergies is histamine which causes inflammation
- The common cold is usually caused by a virus and treated with OTC and supportive care

Drug class: Intranasal glucocorticoids

- Drug:
  - Fluticasone (Flonase)
- MOA: Anti inflammatory
- Indications: Allergic rhinitis
- Considered most effective OTC treatment for allergic rhinitis

Drug class: Histamine one receptor antagonist (Antihistamine)

- Drugs:
  - Diphenhydramine (Benadryl)
  - Loratadine (Claritin)
  - Fexofenadine (Allegra)
  - Cetirizine (Zyrtec)
- MOA: Blocks inflammation by blocking histamine
- Indications: Allergies, insomnia, EPS
- SE/AE: Drowsiness (First generation only)
- Classified as first or second generation. Second generation does not cause drowsiness

Drug class: Nasal decongestants

- Drug:
  - Oxymetazoline (Afrin)
  - Pseudoephedrine (Sudafed)
  - Phenylephrine (Neo-synephrine)
- MOA: Stimulates alpha adrenergic receptors causing local nasal vasoconstriction
- Indications: Nasal congestion
- SE/AE: Restlessness
- Intranasal provides faster relief versus oral medication
- Patient education: Can cause rebound nasal congestion, especially with long-term use

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Cough pathophysiology review

- Sensory receptors in the upper airway detect stimuli and send a message to the cough center
- Causes include: Medications, infections, inflammation, or irritants.

Drug class: Antitussive

- Drug:
    - Dextromethorphan (Delsym, Robitussin)
- MOA: Decreases sensitivity of cough receptors
- Indications: Suppress coughing

Drug class: Expectorant

- Drug:
    - Guaifenesin (Mucinex)
- MOA: Reduces the viscosity and adhesiveness of respiratory tract secretions
- Indications: Enhances the effectiveness of coughing

Drug name: Codeine

- MOA: Suppresses cough
- Indications: Pain, cough and diarrhea
- Controlled substance (CS V)
- SE/AE: CNS depression, constipation, and hypotension
- Black Box warning: Risk for abuse and dependency and respiratory depression
- By prescription only
- Patient education: Should not be taken with alcohol or other CNS depressants

Drug name: Benzonatate (Tessalon Perles)

- MOA: Anesthetizes cough stretch receptors
- Indications: Cough
    - Symptomatic relief of nonproductive (dry) cough
- By prescription only
- Patient education: Must be swallowed whole

Drug class: Mucolytics

- Drugs:
    - Acetylcysteine
- MOA: Directly decrease viscosity of mucous
- Indications: Cough
    - Management of thick, viscous secretions in conditions like chronic bronchitis, cystic fibrosis, COPD, and pneumonia.
- N-acetylcysteine is used for acetaminophen overdose

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References

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