Drug Classes & Actions : Antihistamines Cheat Sheet

by Roxanne (Reuben) via cheatography.com/69645/cs/18367/

Commonly Prescribed For...

Allergic Rhinitis	Hay Fever	Insomnia
Nasal Congestion	Anaphylaxis	Urticaria
Motion Sickness	Angioedema	Drug Fevers
Parkinson-like Reactions		

Indications

Allergy Symptoms

Sedative

Anticholinergic-Properties: Antihistamines effect the secretions of the lacrimal, salivary, and respiratory mucosal glands.

What is Histamine?

Released By: mast cells, basophils, and other cells in response to antigens circulating in the blood.

Mechanism Of Action: bind to/activate cells in the nose, eyes, respiratory tract, GI tract, and skin, producing characteristic allergic S&S

MOA - Receptor Antagonist & Inverse Agonist

H Receptor Antagonist: Competes with histamine at the unoccupied H receptor sites of basophil and mast cells in the smooth muscle surrounding blood vessels and bronchioles.

Inverse H Receptor Agonist: Binds to the H receptors and instead of taking up the space, induce the opposite effect of a histamine.

First Generation: Strong sedative effect, can increase the effect of opiods analgesics and some non-opiod analgesics. Can be used as an analgesic itself in some cases (orphenadrine)

Second Generation: Less likely to cause adverse effects on the heart, central nervous system and other organs than first generation antihistamines. Have a less sedative effect because they cross the blood--brain barrier slower and act mainly on peripheral receptors. Have a longer duration of action.

Third Generation: Stimulant and nootropic effects.

Fourth Generation: Immunomodulatory effects

NOTE: Antihistamines do not block histamine release, antibody production, or antigen-antibody reactions. They also don't push off histamines from receptor sites.

Generic & Trade Names

Generic	Trade	Route
Peripherally Acting		
Loratadine	Claritin	Tablet (10mg), Soft Gel Capsule (10mg), Syrup (1mg/ml)

Generic & Trade Names (cont)

Cetirizine Hydrochloride		
Fexofenadine Hydrochloride		
Traditional		
Diphenhydramine Hydrochloride	Aller-Aide®, Allernix®, Benadryl®, others	caplets, capsules, chewable tablets, liquid, injection, spray, creams, lotions

Name Endings

-astine	Antihistaminics
-azoline	Antihistaminic, local vasoconstrictor
-rizine/izine/yzine	Antihistaminic, peripheral/cerebral vasodilator
-tadine	H1-receptor antagonists, tricyclic compounds
-tidine	H2-receptor antagonists, cimetidine derivatives

Precautions & Contraindictions

Impaired Kidney Function	Pyloric Obstruction	BPH
Severe Liver Disease	Prostatic Hypertrophy	Children <6yrs
Peptic Ulcer Disease	Hypersensitivity	Pregnancy
Cardiovascular Disease	Seizure Disorders	Hyperthyroidism
Pulmonary Disease (COPD)	Angle-Closure Glaucoma	

Interactions

Interactions	Increases	Decreases
MAO Inhibitors	Anticholinergic Properties	
CNS Depressants	Sedation Effects	

CNS Depressants: Alcohol, antidepressants, opiod analgesics, sedatives & hypnotics

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Side Effects

Cardiovascular			
Dysrhythmia	Palpations	Syncope	Hypotension
CNS			
Paradoxical Excitement	Sedation	Nervousness	Dizziness
Muscular Weakness	Restlessness	Seizures	
Gastrointestinal			
Nausea & Vomiting	Hepatitis	Diarrhea	Constipation
Other			
Visual Disturbances	Xerostomia	Tinnitus	Vertigo
Dry Nose & Throat	Headache	Urinary Retention	

Assessments

Nausea & Vomiting: Assess the degree and frequency of nausea and the amount of emesis when administering for nausea and vomiting

Anxiety: Assess mental status, mood, and behavior when administering for anxiety.

Pruritus: Observe character, location, and size of affected area when administering for pruritis skin conditions.

Respiratory: Assess lung sounds for bronchial secretions. Maintain fluid intake (1500-200ml/day) to decrease viscosity secretions.

Allergy Symptoms: Assess for this before and periodically throughout treatment.

IV Therapy: Assess BP and RR before and throughout IV therapy.

Nursing Diagnosis

Ineffective Airway Clearence	Indications
Risk for Injury	Adverse Reactions
Deficiet Knowledge (Disease Process/Medication Regimen)	Patient/Family Teaching

Implementation

Prophylaxis of Motion Sickness: Administer 30min-2hrs before exposure to motion sickness inducing conditions.

Concurrent Use w/ Opiod Analgesics: Supervise ambulation to prevent injury secondary to increased sedation.

Patient Education

Drowsiness: Inform patient they may feel drowsy. Avoid driving and activities requiring alertness.

Sedation: Caution patient to avoid concurrent use of alcohol or CNS depressants.

Xerostomia: Advise patient good oral hygiene, frequent mouth rinsing with water, and sugarless gum/candy may relieve from mouth dryness

Persistent Symptoms: Inform patient to contact a health care professional if symptoms persist.

Evaluation/Desired Outcomes

Decrease/Prevent nausea	Decrease allergic S&S
Decrease/Prevent vomiting	Relieve pruritus
Sedation when used as a hypnotic	Decrease anxiety

Additional Notes

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