Furosemide (Lasix)

F: Loop Diuretic **C:** Sulfonamide Derivative

Action: Inhibits reabsorption of sodium and chloride at proximal and distal tubes at loop of Henle

Indication: Pubmonary edema, CHF, hepatic dz, nephritic syndrome, ascites and HTN

Safe Dose Range: 20-40mg increase by 20mg q 24h

Dilute: NS or DW

Rate of administration: **20mg or less/min**

Side effects: headache, fatigue, weakness, OH, tinnitus, blurred vision, metabolic alkalosis, Hypokalemia, Hyponatremia, hyperglycemia, nausea, diarrhea, dry mouth, vomiting, polyguria, renal failure, thrombocytopenia, neutropenia, anemia, rash, purities, sweating, photosensitivity,

Digoxin (Lanoxin) – High Alert

F: Cardiac glycoside, antidysrhythmic **C:** Digoxin preparation

Action: Increase cardiac output (positive inotropic effect), increase force of contraction, and decrease heart rate (negative chronotropic effect). The heart work smarter, not harder.

Indication: heart failure, Afib, atrial flutter, atrial tachycardia, cardiogenic shock, paroxysmal atrial tachycardia

Safe Dose Range: 0.6 – 1mg given as 50% of the dose initially, additional fractions given at 4-8h intervals

Dilute: Undiluted or 1ml/4ml of sterile water, D5, or NS

Rate of Administration: **MORE than 5 min**

Prochlorperazine (Compazine)

F: Antiemetic, antipsychotic **C:** Phenothiazine, piperazine derivative

Action: D2 (dopamine) receptor antagonist

Indication: Nausea, vomiting, psychotic disorders

Safe Dose: 5-10mg

Dilute: NaCl, 5mg/9ml

Rate: **5mg or less/min**

Side effects: depression, drowsiness, restlessness, tremor, dizziness, headache, tachycardia, hypotension, nausea, vomiting, anorexia, dry mouth, diarrhea, constipation, weight loss, metallic taste, cramps, agranulocytosis, respiratory depression, neuroleptic malignant syndrome, tardive

Cardizem (Diltiazem)

F: Calcium Channel Bocker **C:** Benzothiazepine

Action: Inhibits calcium ion influx across cardiac depolarization, produce relaxation of coronary vascular smooth muscle, dilates coronary arteries

Indication: Angina, HTN, Afib, paroxysmal supraventricular tachycardia

Safe Dose: 0.25 mg/kg over 2 min initially, then 0.35mg/kg over 15min

Dilute: IV undiluted over 2 min or diluted 125mg/100mm of DSW, NaCl

Rate: **2 min**

Side Effects: headache, fatigue, drowsiness, weakness, insomnia, dysrhythmia, bradycardia

Hydralazine (Apresoline)

F: Antihypertensive, direct acting peripheral vasodilator **C:** Phyhalazine

Action: vasoldilates arteriolar smooth muscles by direct relaxation (decrease in b/p, with reflex increase in heart rate, stroke volume, cardiac output)

Indication: HTN, unlabeled: CHF

Safe Dose: 10-20mg q 4-6h

Dilute: IV undiluted

Rate: **10mg/min or MORE**

Side Effects: headache, tremors, dizziness, anxiety, palpitations, tachycardia, shock, rebound

Metoclopramide (Reglan)

F: Cholinergic, Antiemetic **C:** Central Dopamine receptor antagonist

Action: Increase response to acctylcholine lines in upper GI, cause contraction of gastric muscle, decrease secretions, bocks dopamine in chemoreceptors triggers

Indication: Prevent nausea, vomiting induced by chemotherapy, radiation, delayed gastric emptying, gastroesophageal reflux

Safe Dose: 1-2mg/kg

Dilute: Undiluted if dose is less or equal to **10mg; giver over 2 min.**

MORE + 10mg: dilute 50ml or more D5W, NaCl, LR, given **over 15 min**

Rate: See above

Famotidine (Pepcid)

F: H2 Histamine receptor antagonist

Action: Inhibits histamine H2 receptor site, decrease gastric secretions

Indication: treatment for duodenal ulcer, gastric ulcers, gastroesophageal reflux disease, heartburn

Safe Dose: 20 mg q 12h

Dilute: dilute 2ml of product (10mg/1ml) in 0.9% NaCl

Rate: **Over 2 min**

Side effects: Headache, dizziness, paresthesia, depression, anxiety, insomnia, fever, dysrythmias, taste change, tinnitus, constipation, nausea, cramps, diarrhea, abnormal hepatic enzymes, thrombocytopenia, aplastic anemia, rash, pneumonia

Ondansetron (Zofran)

F: Antiemetic **C:** 5-HT3 receptor antagonist

Action: Prevents nausea, vomiting by blocking serotonin, peripherally, centrally and in the small intestines

Indication: Prevention of nausea, vomiting associated with cancer chemotherapy, radiotherapy and postoperative nausea, vomiting

Safe:

- Cancer Chemo: 1.15mg/kg over 15 min or 32mg dilute in 50ml of D5 or 0.9% NaCl
- Postoperative: **4mg undiluted over 30 sec**

Dilute: yes for chemo (**32mg dilute in 50ml** of D5, 0.9% NaCl), postoperative (undiluted)

Single dose in 50ml of NS or D5W, 1/2NS **over 15 min**

Methyiprednisolone (Soln-Medrol)

F: Corticosteroid **C:** Glucocorticoid, immediate acting

Action: Decrease inflammation, suppress leukocyte and fibroblast (framework) migration, and decrease capillary permeability

Indication: severe infamm, shock, adrenal insufficiency, collagen disorders, spinal cord injuries, MS

Safe Dose: Inflamm; 10-250 mg q 2-6h Bronchospasm, prophylaxis; 40-80mg/day in 1-2 divided dose

Dilute: yes, 500 mg or less/1 min or longer (Dilutant not provided in book, states "after diluting with dilutent provided)

Rate: **1 min or longer**

Toradol (Ketorolac)

F: Nonsteroidal anti-inflammatory, non-opioid analgesic **C:** Acetic Acid

Action: inhibit prostaglandin synthesis, analgesic, anti-inflammatory, antipyretic effects

Indication: Mild to moderate pain

Safe Dose: 15-30mg or 15mg q6h, max 60mg/day for 5 days

Dilute: Undiluted over>or equal to 15 sec, D5W, 0.9NaCl, LR, D5

Rate: **over 15 sec**

Side Effects: dizziness, drowsiness, tremors, seizures, HTN, flushing, syncope, pallor, edema, vasodilation, MI, stroke, tinnitus, hearing loss, blurred vision, nausea, vomiting, diarrhea, constipation, dry mouth, GI bleed, taste change, hepatic failure, nephrotoxicity, dysuria

Morphine (Morphine Sulfate)

F: Opioid Analgestc **C:** Alkaloid

Action: Depress pain impulse transmission at the spinal cord level, interrupts opionoid receptors

Indication: Moderate to severe pain

Safe Dose: 2.4-15mg diluted in 4-5 ml of H2O over 5 min

Dilute: 5 ml or more sterile water, or NS

Rate: **over 5 min**

Side Effects: drowsiness, dizziness, confusion, headache, sedation, seizure, palpitations, bradychardia, change in b/p, shock, cardiac arrest, chest pain, hypo/hypertension, edema, tachycardia, tinnitus, blurred vision, nausea, vomiting, constipation, cramps, rash, bruising, flushing, diaphoresis

Dilaudid (Hydromorphone)

F: Opiate analgesic **C:** Semisynthetic phenanthrene

Action: inhibit ascending pain pathway in CNS, increase pain threshold, alters pain perception

Indication: moderate to severe pain

Safe Dose: 1-2 mg q4-6 prn, may be increased

Dilute: direct, **diluted with 5 ml of sterile H2O, or NS**

Rate: **2mg or less/3-5 min**

Side Effects: drowsiness, dizziness, headache, sedation, seizures, palpitation, bradychardia, change in b/p, tachycardia, peripheral vasoldilation, tinnitus, blurred vision, nausea, vomiting, constipation, dry mouth, paralytic ileus, increased urinary output, dysuria, rash, uriticaria, bruising, flushing,

Meperidine (Demerol)

F: Opioid analgesic **C:** Phenylpiperidine derivative

Action: depress pain impulse transmission at the spinal cord level by interacting with opioid receptors

Indicators: Moderate to severe pain, preoperative and postoperatively

Safe Dose: 15-35 mg/hr

Dilute: with 5 ml or more of H2O or NS, give over 4-5min

Rate: **4 – 5 min.**

Side Effects: drowsiness, dizziness, confusion, sedation, seizure, palpitations, barycardia, hypotension, change in b/p, tachycardia, tinnitus, blurred vision, nausea, vomiting, constipation, cramps, paralytic ileus, urinary, bruising, flushing, diaphoresis, respiratory depression, anaphylaxis

Benadryl (Diphenhydramine)

F: Antihistamine **C:** Ethanolamine derivative, H1 receptor antagonist

Action: decrease allergic response by blocking histamine

Indication: allergy symptoms, rhinitis, motion sickness, nonproductive cough, nighttime sedation

Safe Dose: 10-50 mg, max 300mg/day

Dilute: undiluted, give 25mg/1 min w/0.9nacl, d5w, nacl, d10w, LR

Rate: 25mg/1min

Side Effects: drowsiness, poor coordination, fatigue, confusion, seizures, hypotension, palpitations, blurred vision, dilated pupils, tinnitus, nasal stuffiness, dry (mouth, nose, throat), nausea,

Valium (diazepam)

F: antianxiety, anticonvulsant, skeletal muscle relaxant **C:** benzodiazepine

Action: potentiates actions of GABA, esp in limbic system (emotion, behavior and mood)

Indication: anxiety, acute alcohol withdrawal, seizure disorder, preoperative, skeletal muscle relaxant

Safe Dose: 2-10 mg q3-4h

Dilute: 5 mg or less/1 min or total dose over 3 min or more, **do not dilute or mix**

Rate: see above

Side effects: dizziness, drowsiness, confusion, headache, anxiety, tremors, fatigue, hallucinations, OH, ECG changes, tachycardia, hypertension, blurred vision, tinnitus, constipation, dry mouth, nausea, vomiting, anorexia, neutropenia, rash, dermatitis, itching, respiratory

Protonix (pantoprazole)

F: Proton pump inhibitor **C:** Benzimidazole

Action: suppress gastric secretions by inhibiting enzymes, blocks acid production

Indication: gastroesophageal reflux disease (GERD), severe erosive esohagitis

Safe Dose: 80 mg q 12 h

Dilute: w/10 ml NaCl, further dilute w/80 ml LR, d5, nacl (0.8mg/ml), give over 15 min or as IV push over 2 min

Rate: **2 min**