**MAT (Medication Assessment Tool)**

**DOSE/FREQUENCY:**

**MEDICATION: theophylline (Elixophyllin, Theochron)** **REF:** Skidmore, 2019, 965

**CLASS: T:** Spasmolytic, bronchodilator  **P:** Xanthine, ethylenediamine **TIME:**

**ROUTE: PO SQ IM ID IV push IVPB NGT/PEG Other:**

**SAFE DOSE (BOOK):** PO max 400 mg/day IV 0.4 mg/kg over 20-30 min

**ACTION:** Relaxes smooth muscle of respiratory system by blocking phosphodiesterase

**INDICATION:** bronchial asthma, bronchospasm in COPD, chronic bronchitis, emphysema

**ASSESSMENTS (INCL. LABS):** drug level (10-20 mcg/ml), signs of toxicity (irritability, insomnia restlessness, tremors, N/V), I, respiratory status, LFTs, allergic reactions

**CONTRAINDICATIONS:** HS to xanthines, tachydysrhythmias (HF, cor pulmonale, hepatic disease, PUD, DM, hyperthyroidism, HTN, seizure disorder)

**SIDE EFFECTS:** anxiety, insomnia, dizziness, seizures, palpitations, tachycardia, dysrhythmias, N/V, anorexia

**EDUCATION:** No OTC w/o approval, Avoid alcohol and caffiene. Avoid hazardous activities, take with 8 oz of water (not food). Notify N/V, anxiety, insomnia, seizures and change in smoking habit

**RATE OF ADMINISTRATION:** 20-30 min (max 20-25 mg/min)

**DILUTION:**

**SAFE DOSE CALCULATION:**

**DOSE/FREQUENCY:**

**MEDICATION: fluticasone (Flonase)** **REF:** Skidmore, 2019, 440

**CLASS: T:** antiasthmatic  **P:** corticosteroid **TIME:**

**ROUTE: PO SQ IM ID IV push IVPB NGT/PEG Other:**

**SAFE DOSE (BOOK):** 2 sprays per nostril once a day

**ACTION:** Decreases inflammation by inhibiting immune response

**INDICATION:** prevention of chronic asthma, nasal symptoms of seasonal allergic or nonallergic rhinitis

**ASSESSMENTS (INCL. LABS):** Respiratory status, blood glucose, serum K+, adrenal insufficiency (nausea, weakness, fatigue, hypotension, hypoglycemia, anorexia)

**CONTRAINDICATIONS:** HS to this or milk, acute bronchospasm (active infection, glaucoma, diabetes, immunocompromised, Cushing syndrome)

**SIDE EFFECTS:** pharyngitis, oral candidiasis, upper RTI, angioedema, bronchospassm

**EDUCATION:** Report no appetite, nausea, weakness, fatigue, decreased BP. Use bronchodilator first. Not for acute asthma attack, Avoid smoking, others with URI

**RATE OF ADMINISTRATION:**

**DILUTION:**

**SAFE DOSE CALCULATION:**

**DOSE/FREQUENCY:**

**MEDICATION: beclomethasone (Beclovent, QVAR)** **REF:** Skidmore, 2019, 108

**CLASS: T:** antiasthmatic  **P:** corticosteroid **TIME:**

**ROUTE: PO SQ IM ID IV push IVPB NGT/PEG Other:**

**SAFE DOSE (BOOK):** 320 mcg 2 x daily

**ACTION:** Prevents inflammation by suppresion of immune system, reversal of increased capillary permeability

**INDICATION:** Seasonal allergy, nasal polyps, chronic steroid dependent asthma

**ASSESSMENTS (INCL. LABS):** WBC, neutrophils ( if 1000/mm3 hold), platelets, respiratory status, fungal infections in mucous membranes, URI

**CONTRAINDICATIONS:** HS, status asthmaticus (bacterial, fungal, viral infections, osteoporosis, DM, measles, cataracts, glaucoma, herpes infection)

**SIDE EFFECTS:** headache, candidal infection of oral cavity, hoarseness, angioedema, adrenal insufficiency, bronchospasm

**EDUCATION:** rinse mouth after each use, do not discontinue abruptly

**RATE OF ADMINISTRATION:**

**DILUTION:**

**SAFE DOSE CALCULATION:**

**DOSE/FREQUENCY:**

**MEDICATION: dexamethasone (Decadron)** **REF:** Skidmore, 2019, 285

**CLASS: T:** synthetic corticosteroid  **P:** glucocorticoid, long acting **TIME:**

**ROUTE: PO SQ IM ID IV push IVPB NGT/PEG Other:**

**SAFE DOSE (BOOK):** PO 0.75-9 mg/day

**ACTION:** Decreases inflammation by inhibiting immune response

**INDICATION:** inflammation, allergies, cerebral edema, septic shock, collagen disorders, TB, meningitis

**ASSESSMENTS (INCL. LABS):** BP, pulse, K+, blood glucose, urine glucose, weight, I, plasma cortisol levels (138-635 nmol/L), assess for infection, edema, cardiac symptoms, changes in mental status

**CONTRAINDICATIONS:** psychosis, thrombocytopenia, acute glomerulonephritis, amebiasis, fungal infections, nonasthmatic bronchial disease, TB, glaucoma, ocular infection

**SIDE EFFECTS:** depression, flushing, sweating, HTN, diarrhea, nausea, increased appetite, abdominal distention, seizures, circulatory collapse, HF, dysrythmias, GI hemorrhage, pancreatitis, angioedema

**EDUCATION:** Do not discontinue abruptly, Avoid OTC. Notify of infection. Avoid people with infections, take with food or milk

**RATE OF ADMINISTRATION:**

**DILUTION:**

**SAFE DOSE CALCULATION:**

**DOSE/FREQUENCY:**

**MEDICATION: ipratropium (Atrovent)** **REF:** Skidmore, 2019, 535

**CLASS: T:** Anticholinergic, bronchodilator  **P:** synthetic quaternary ammonium compound **TIME:**

**ROUTE: PO SQ IM ID IV push IVPB NGT/PEG Other:**

**SAFE DOSE (BOOK):** Max 12 inhalation sprays/day, nebulizer solution 500 mcg

**ACTION:** Inhibits acetylcholine at receptor sites on bronchial smooth muscle, causing dilation

**INDICATION:** bronchospasm, COPD, rhinorrhea

**ASSESSMENTS (INCL. LABS):** respiratory status and function, ABGs, HR, allergic reactions

**CONTRAINDICATIONS:** HS to this atropine, bromide, soybean or peanuts (angioedema, HF, surgery, bronchospasm, glaucoma, prostatic hypertrophy, urinary retnetion)

**SIDE EFFECTS:** anxiety, dizziness, headache, N/V, cramps, cough, worsening symptoms, bronchospasm

**EDUCATION:** No OTC, follow doage schedule, wash inhaler daily. Limit caffeine

**RATE OF ADMINISTRATION:**

**DILUTION:**

**SAFE DOSE CALCULATION:**