Acronyms

1. SABA Short Acting Beta 2 -Agonist
2. LABA Long Acting Beta2-Agonist
3. ICS Inhaled Corticosteroids
4. LTRA Leukotriene Receptor AnTAGonist
5. I Inhale techniques
   1. Inhale
      1. Duration 5 hr
   2. DPI (dry powder)
      1. Duration 12 hr
6. C Compliance
7. E Environment

Asthma – Management of Asthma

* 1. anticholinergic short acting (use in ER)
     1. ipratropium
  2. beta2-agonist
     1. albuterol short acting
     2. Salmeterol Long acting
  3. corticosteroids long term
     1. Flovent
     2. Fluticasone
  4. cromolyn and nedocromil Mast cell stabilizer
  5. leukotriene modifiers leukast
     1. Singulair, Zieuton
  6. theophylline
  7. IgE blockers -mab
     1. omalizumab

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| **Medications** | **Adult dose** |
| Inhaled short-acting beta-agonistAlbuterol Nebulizer solution (5 mg/ml)  (mask)  MDI (90 mcg/puff) Levalbuterol Nebulizer solution  MDI | 2.5–5 mg every 20 minutes for 3 doses, then  2.5–10 mg every 1-4 hours as needed  4-8 puffs every 20 minutes up to 4 hours, then . every 1-4 hours as needed |
| AnticholinergicsIpratropium bromide Nebulizer solution (0.25 mg/ml)  MDI (18 mcg/puff) | **EMERGENCY ROOM ONLY, NOT IN HOSPITAL ADMISSION (new guideline)**  0.5 mg every 20 minutes for 3 doses, then . . every 2-4 hours as needed  4-8 puffs as needed |
| Systemic CorticosteroidsPrednisone *Methylprednisolone*  *Prednisolone*  Also need some supplemental oxygen ventilation | **ORAL IS THE PREFERRED ROUTE**  120-180 mg/day in 3-4 divided doses for 48 hours, then 60-80 mg/day until PEF reaches 70% |

Asthma Medication Method

1. Step 1: Preferred Short Acting Beta2 Agonist
2. Step 2: mild Low dose Inhaled corticosteroids
3. Step 3: moderate Low dose Inhaled corticosteroids + Long acting Beta Agonist
4. Step 4: Severe Medium ICS + LABA
5. Step 5 High dose ICS + LABA
6. Step 6 High dose ICS + LABA + Corticosteroids

Corticosteroids

1. Treat: long term prevention of symptoms
2. Drug: Prednisone 20 mg
   1. Dosing 1 t po bid
3. Drugs
   1. Beclomethasone
   2. Budesonide
   3. Ciclesonide
   4. Flunisolide
   5. Flunisolide
   6. Fluticasone
   7. Mometasone
   8. Triamcinolone
4. Adverse Effects Higher risk of pneumonia 🡪 dry mouth 🡪 cough

Mast Cell Stabilizers

1. Treat: Long term prevention of symptoms
2. Dosing
   1. Dosing: 3-4 times a day
   2. Response: 2 weeks to take effect
3. Drug
   1. Cromolyn (Intal)
   2. Nedocromil (Tilade)

Leukotriene Modifiers

1. Treat: Long term control prevention of symptoms
2. Chruss-Strauss syndrome : Eosinophil vesulitis 🡪 but not due to lukast but . actually due to reduce steroid because steroid inhibit eosinophil

Anticholinergic Agent

1. Ipratropium