Treatment of Chronic Persistent Asthma

- Asthma means a syndrome characterized by periodic spasm of bronchial smooth muscle
- In this asthma, bronchodilator drugs are given in rotation method. One during each week.

Treatment of Chronic Persistent Asthma

- Salbutamol and orciprenaline should be used to treat acute attacks when they occur
- Corticosteroids can be used if the patient is symptom free
- If therapy provides improvement then long term use of steroids can be used.

Nasal decongestants

- These are the dugs which decrease nasal congestion
- Nasal decongestion can be produced by sympatho mimetic drugs acting through alpha receptors
- The drugs produce vasoconstriction and shrinking of nasal mucosa

Drugs used are

- Ephedrine produces nasal decongestion due to effect on alpha receptors.
- Preparation: 0.5% solution in normal saline.

Side effects are

- Tachyphylaxis
- After congestion and systemic effects

The other Drugs Which act on Alpha receptors

- Phenylephrine
- Xylometazoline Hydrochloride
- Oxymetazoline
- Taumine sulphate
- Taumine Heptane
- The decongestants are combined with antihistamines, corticosteroids and antibiotics

The Drugs used in the Treatment of Cough

- Cough is produced by cough reflex, which is integrated in cough center in medulla
- Cough is a protective reflex by which an irritant or obstructive material is expelled from the respiratory tract

- The act of coughing involves initial deep inspiration followed forced expiration against temporarily closed glottis

Cough is of two types

a) Productive cough in which sputum is present

b) Unproductive cough or dry cough (without much sputum)

Causes of Cough

1) Upper respiratory tract – infection
2) Acute lung infection, Asthma
3) Pleural diseases
4) Chronic pulmonary diseases like bronchitis

   Tuberculosis
5) Secondary to left ventricular failure

Treatment of Cough

- Treatment of cough depends upon the cause

Classification of drugs

I. Pharyngeal demulcents:

- Syrups
- Linctuses
- Lozenges
- Glycerine
- liquorice

II. Expectorants

a. Direct expectorants: Eucalyptus oil,

Sodium and Potassium citrate

Guaiphenesin,

Lemon Oil,

Guaiacol

Balsam of tolu,

Anise Oil,

Vasaka

b. Reflex expectorants: Ammonium Chloride or Carbonate

Potassium Iodide Ipecacunha

c. Central cough suppressants

Codeine
Noscapine

c) Mucolytics

Bromohexine,
Ambroxol,
Acetyl cysteine

III. Antitussives (Cough centre suppressants)

a) Opiods → Codeine, Morphine, Pholcodeine, Ethylmorphine

b) Non – opoids → Noscapine, Dextromethorphan

→

c) Antihistamines → Chlorpheniramine, Diphenhydramine

I. Pharyngeal demulcents: These drugs are administered in the form of

- Lozenges
- Cough drops
- Linctuses and syrups
    - They act by increasing the flow of saliva which produces soothing and demulcent action
    - They provide symptomatic relief in dry cough

Expectorants:

Are drugs which induce respiratory tract secretions so as to liquefy them and decrease their viscosity and help in expulsion.

Direct expectorants : They are

- Eucalyptus Oil
- Lemon Oil
- Anise Oil

These oils are administered directly or inhaled with steam

Reflex expectorants: These drugs produce mild irritation of the gastric mucosa which stimulates respiratory reflexes.

They help to increase the respiratory secretions. In larger doses the produce vomiting.

Eg: Ammonium chloride, ammonium bicarbonate, Potassium iodide.

Side effects: Nausea, and vomiting.

Central Cough Suppressants (Antitussives)

- Codeine and Noscapine are used as narcotic antitussives
- They act on cough centre in the medulla and inhibit cough reflex
- Codeine is administered as linctus
- Dose 4 ml
- Noscapine is administered at a dose of 15 to 30 mg

  3 to 4 times a day orally.