## **18.1. CHOLINERGIC ANTAGONISTS**

## 18.1.1. Introduction

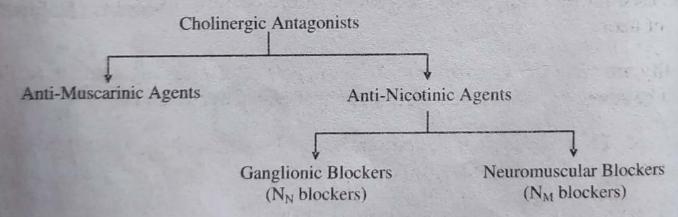
Cholinergic antagonists (or anticholinergic or parasympatholytic drugs) occupy the ACh receptors (and do not allow ACh to bind to the receptors) and prevent the actions of ACh. They are also termed as cholinergic blocking agents, muscarinic antagonists, anti-parasympathetic agents, anti-muscarinic agents, and antispasmodics.

Anticholinergic and cholinergic agonists act oppositely. Major anticholinergic effects include a decrease in GI motility and salivation, pupil dilation (mydriasis), and an increase in pulse rate.

Decreased bladder contraction which results in urinary retention, and decreased rigidity and tremors in association with neuromuscular excitement are some other effects. Another significant action of anti-cholinergics includes its effect as an antidote for organophosphorous poisoning and poisoning caused by consumption of cholinesterase inhibitors.

## 18.1.2. Classification

Cholinergic antagonists are classified as follows:



## 18.1.3. Individual Compounds

The following drugs are studied in detail:

- 1) Atropine,
- 2) Hyoscine,
- 3) Homatropine,
- 4) Propantheline,
- 5) Benztropine,
- 6) Tropicamide, and
- 7) Biperiden.