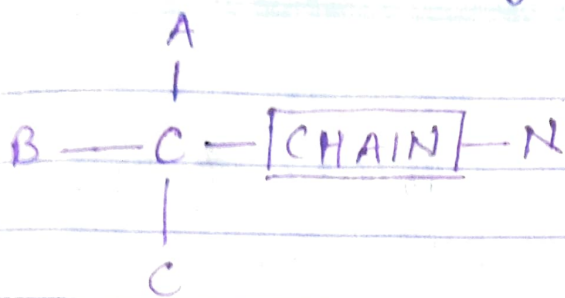


Anticholinergic SAR



A, B = bulky gp

eg. cycloalkyl, aromatic

C = H, OH, carbonyamide

- The N is separated from the C by a chain that may be ester, ether or hydrocarbon.
- gp A & B contain at least one aromatic moiety capable of vander waal's interaction to receptor surface and one cycloaliphatic moiety for hydrophobic interaction.
- C may be OH or carbonyamide for formation of H-bonding.

① Cationic head -

The antich molecule attached to ch site through the quaternary ammonium comp but for tertiary amine there is a need to change into c⁺ head by protonation.

② Hydroxyl group -

- Hydroxyl gp enhance the antimuscarinic activity
- ~~gt~~ strengthening the binding with receptor by H-bonding

③ Esteric gp -

Ester gp increase the polarity of the comp