

## Indirect acting cholinomimetics ((drugs only))

### • reversibly CE inhibitors

\* Neostigmine  $\Rightarrow$  • Synthetic CEI

- Doesn't cross BBB
- duration 4hrs
- mainly used for MG
- antidote to competitive NM blocker tubocurarine poisoning
- paralytic ileus, urinary retention
- given orally, SC

\* pyridostigmine  $\Rightarrow$  • Longer duration (More specific)

- orally in MG 6 hrs

\* edrophonium  $\Rightarrow$  • IV

- Short duration of action (10-20 min)
- used to diagnosis of MG

\* tacrine  $\Rightarrow$  • treatment of Alzheimer's disease

- hepatotoxic

\* Donepezil  $\Rightarrow$  • Selective CEI

- lacks hepatotoxicity of tacrine
- once daily  $\Rightarrow$  (half life 24 hrs)
- useful in Alzheimer's disease

### • irreversible CE inhibitors (organophosphorous)

\* Isoflurophate  $\Rightarrow$  • toxicity  $\therefore$  excessive Cholinergic stimulation

- may be used topically in glaucoma
- duration of action about a week

\* Echothiopate  $\Rightarrow$  • long duration of action (week)

- similar to isoflurophate

### • treatment of OP poisoning

\* atropine  $\Rightarrow$  Blocker (IV or IM)

\* Diazepam  $\Rightarrow$  convulsions

\* pralidoxime  $\Rightarrow$  enzyme reactivation (IM)

Done ❤