

# Sympatholytics or Antiadrenergic drgs

Central Sympatholytics  
( $\alpha_2$  agonist)

Adrenergic  
Rr blockers

Clonidine,  
← Methyl dopa

$\alpha$  blocker

$\beta$  blocker

Note: When  $\alpha_2$  Rr stimulate it  $\downarrow$  release of NA. Adrenal  
It is present presynaptically (auto R<sub>1</sub>)

## $\alpha$ Blockers

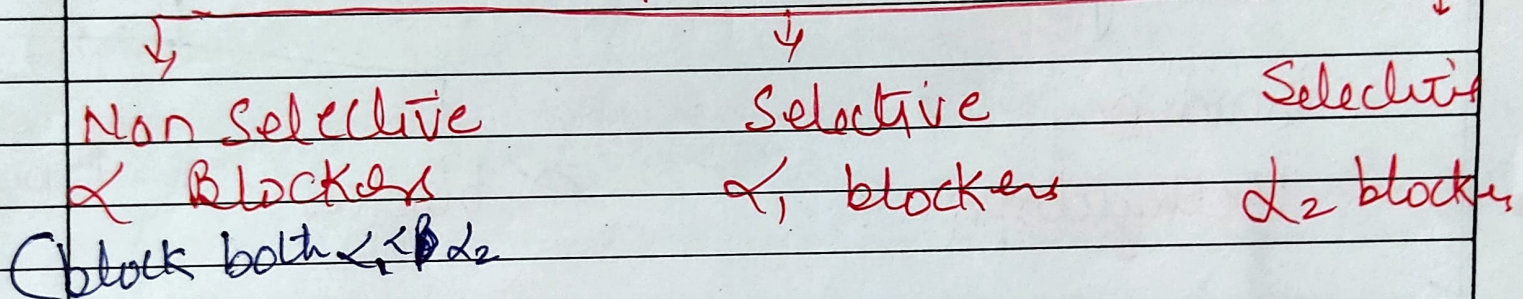
- ① Vasodilator
- ② Tachycardia
- ③  $\uparrow$  Insulin Release, good for Diabetes Mellitus
- ④ Good for dyslipidemia  
 $\uparrow$  HDL,  $\downarrow$  LDL

## $\beta$ Blockers

- ① vasoconstrictors
- ② Bradycardia
- ③ Bad for DM
- ④ Bad for Dyslipidemia

# Sympatholytics / Antiadrenexg dgs

## $\alpha$ Blockers



## Non selective $\alpha$ Blockers

- 1) irreversible - Phenoxybenzamine ~~xx~~  
block  $\alpha_1$  &  $\alpha_2$  (Non competitive)
- 2) binds covalently to  $\alpha$ -Rs & cause irreversible blockade

Route - I/v, Oral  
Slow onset, long duration of action

Use! Doc to control symptoms of Pheochromocytoma

It is a tumor of adrenal gland from  
due to c there is ↑ secretion of Adrenalin & NA

(3)

S.E. - Postural hypotension, Tachycardia, Palpitation  
due to  $\alpha_1$  blockage

Reversible blockers

Phentolamine, Tolazoline

Ergolamine, Chlorpromazine

block  $\alpha_1$  &  $\alpha_2$  (Competitive)

Phentolamine:- IV: rapid onset, short duration

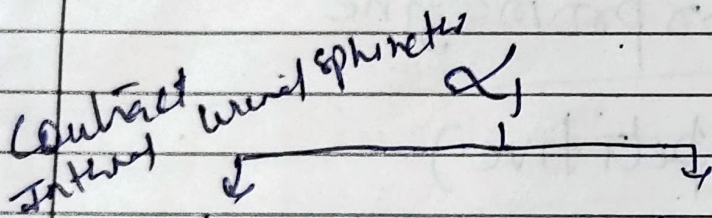
DOC - Chees Reni.

# Selective $\alpha_1$ Blockers

Prazosin, Terazosin.

Alfuzosin, Doxazosin.

Losin



$\alpha_1A$  - gives  
wrist spasm

$\alpha_1A$

$\alpha_1B$   $\rightarrow$  vasoconstriction  $\rightarrow$   $\uparrow$  BP

$\alpha_1$  blocker  $\rightarrow$  use for BPH (Benign prostatic hyperplasia)  $\rightarrow$   $\uparrow$  in size of prostatic gland  $\rightarrow$  urethra constriction difficult to urinate.

$\alpha_1$  blocker - Urination

$\alpha_2$  blocker - Cause vasodilation  $\rightarrow$   $\downarrow$  BP  
 $\rightarrow$  T/T of Hypertension

(5)

Prazosin: - Selective  $\alpha_1$  blocker, orally  
\* It does not block Presynaptic  $\alpha_2$  Rr  
so not cause side effects like tachycardia  
Doc in BPH with hypertension

SE: - Postural hypotension & Syncope

(Syncope:- First dose effect.)

Occurs within 30-90 mins of oral admin

\* Therefore, ~~so~~ initial dose shd be small (1mg)  
\* Shd be given at bed time

② Floppy iris Syndrome

Doc BPH

Selective  $\alpha_{1A}$  blocker  $\rightarrow$  TAMSULOSIN  
(uroselective) - SILODOSIN

[ TAMSULOSIN - cont HTN

Prazosin -  $\bar{c}$  HTN

Selective  $\alpha_2$  blocker

Yohimbine - It blocks  $\alpha_2$  Rr as well

5HT<sub>2</sub> Rr. (Serotonin)

Use: It  $\uparrow$  Libido  $\rightarrow$   $\uparrow$  Sexual Performance.  
It is Aphrodisiac.