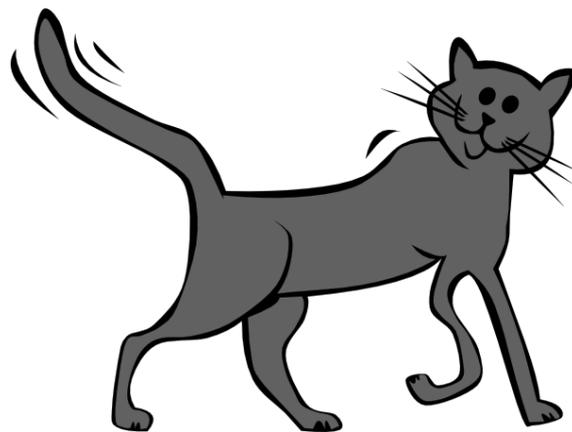


# Pharmacology Team

Practical

Cat Blood Pressure



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Arwa Al-Madani

Especial thanx to Arwa

And good luck everyone

## Pharma practical

Agonist ) ● Adrenaline

1. ↑ BP

\* vasoconstriction ( $\alpha$ -receptors)

2. ↑ HR

\* act on  $\beta_1$  receptor

\* active on  $\beta_2$  receptor (vasodilatation)

↳ This why they don't increase BP for along time

$\beta_1 \rightarrow$  Heart  
 $\alpha$  and  $\beta_2 \rightarrow$  vessels  
↓  
vaso constrictor      vaso dilator

Agonist ) ● Nor Adrenaline

Same as adrenaline

But has a little effect on  $\beta_2$

So long time for increasing BP

Antagonist ) ● Tolazoline

Block  $\alpha_1 - \alpha_2$  receptors (non-selective Blocker)

✱ After adding (Adrenaline or noradrenaline)

it will block there effect on BP (Hypotention)

No (effect) on HR cause no affect on  $\beta_1$   
decrease

So after adding (adrenaline or noradrenaline) after blocking  $\alpha$  receptors with (Tolazoline) :- BP: (Hypotention)

HR: increase HR

(Agonist) ● **Isoprenaline**

1. increase HR → It can lead to tachy cardia cause it is specific.

2. Hypotention

\* Because it is B agonist SO it will work on

‡  $\beta_1$  on the heart

‡  $\beta_2$  on vessels (Vasodilator)

(Antagonist) ● **pindolol**

Blockes B receptors

SO After adding Isoprenaline nothing will happen

(Block increase HR & Hypotention).

(Agonist) ● **Acetylcholine**

1- ↓ HR

2- ↓ BP

\* acting on Muscarinic receptors present on SA node

\* " " " " " " " " Blood vessels.

(Antagonist) ● **Atropine**

Block muscarinic receptors presents on SA node

‡ Blood vessels

SO after addin Acetylcholine no. ↓ HR

↓ BP

Arwa

Good luck 🍀