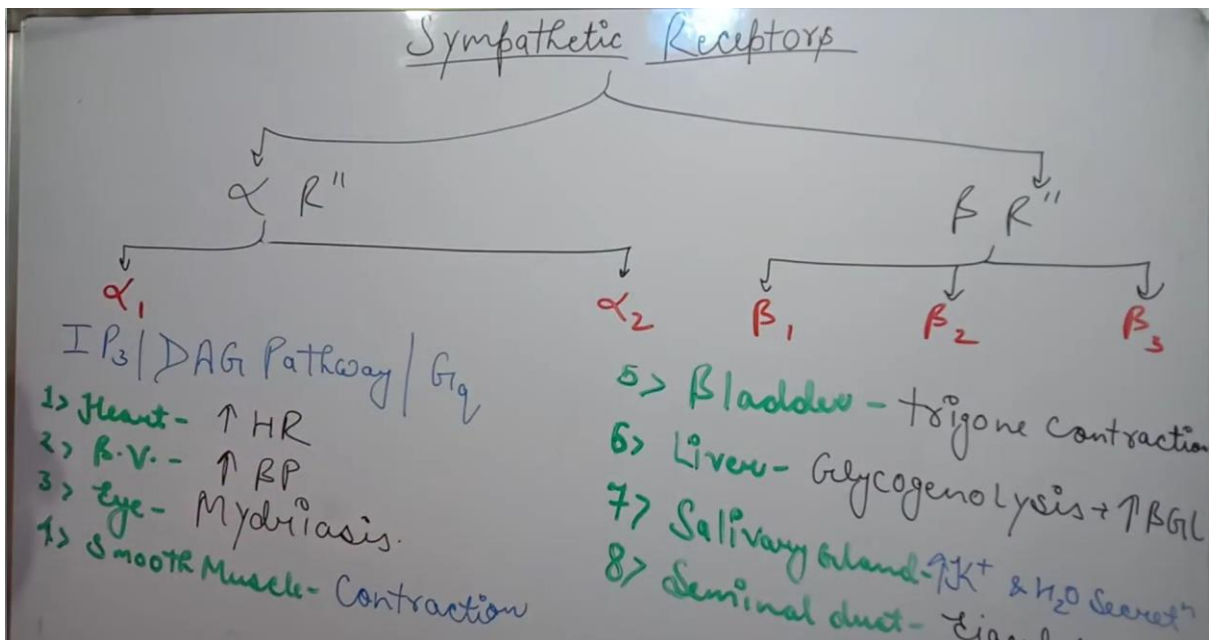
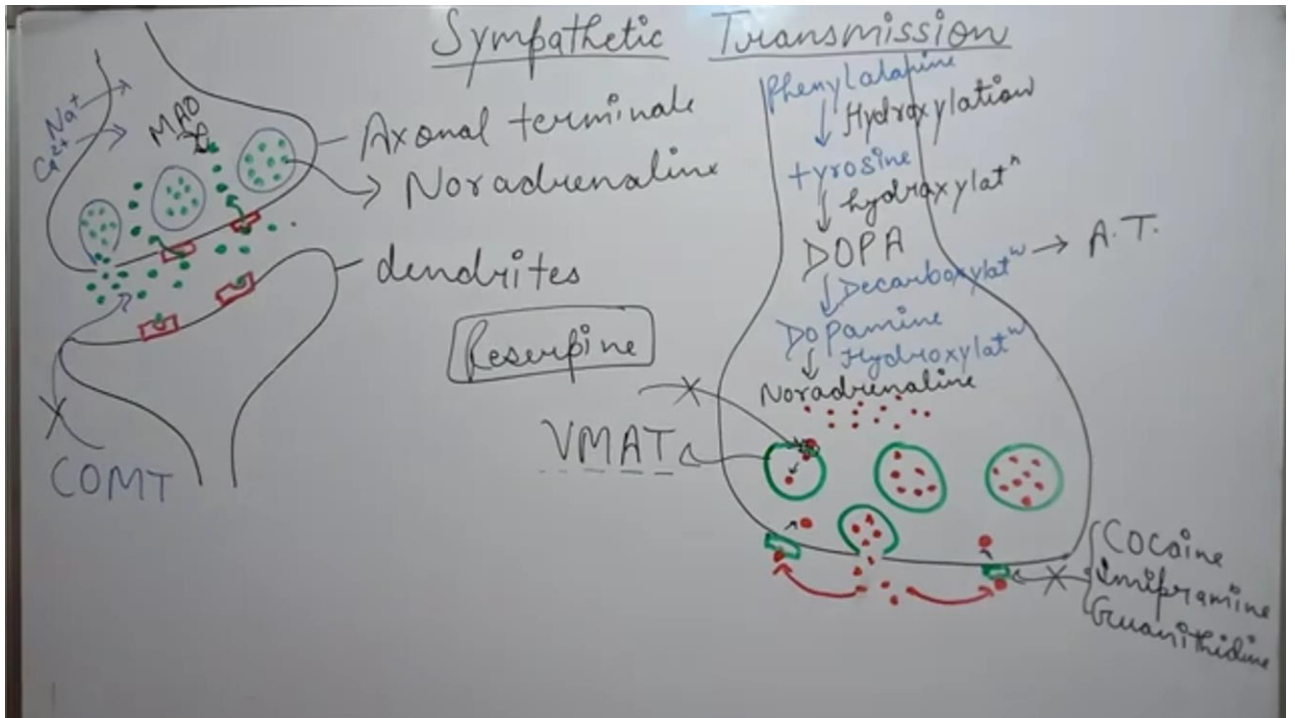
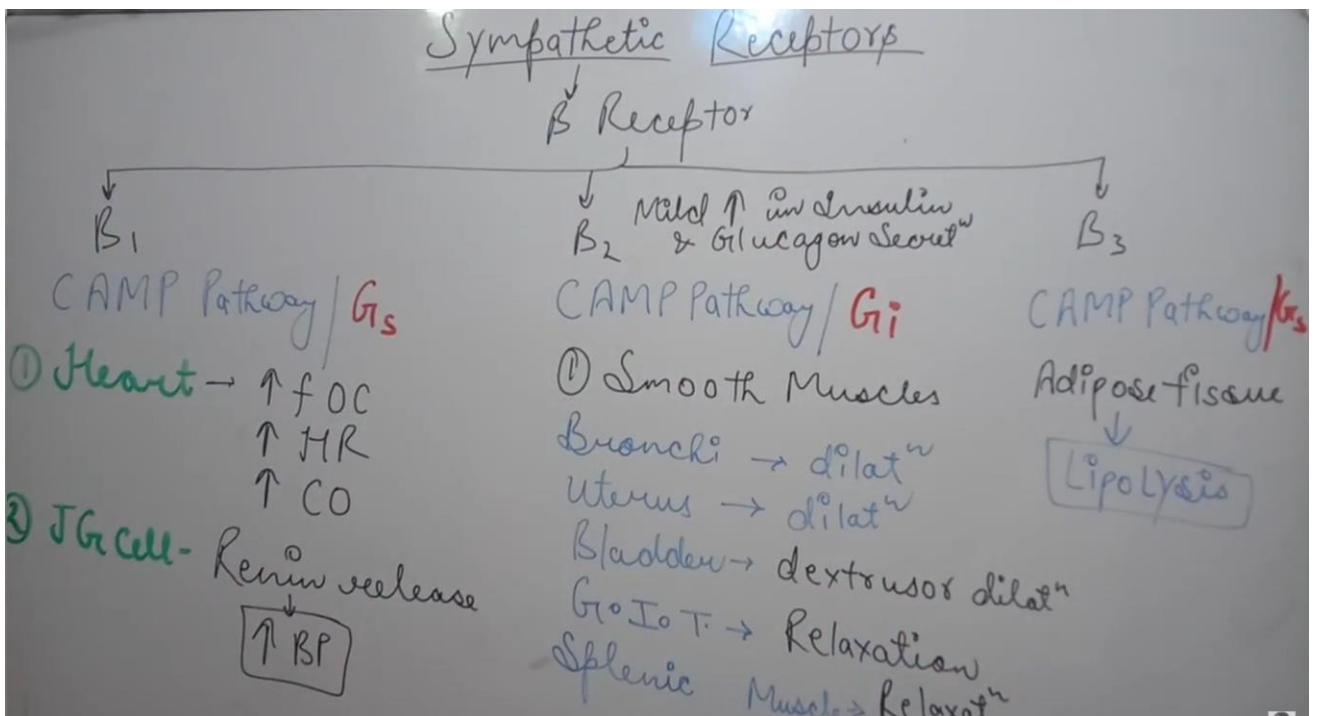
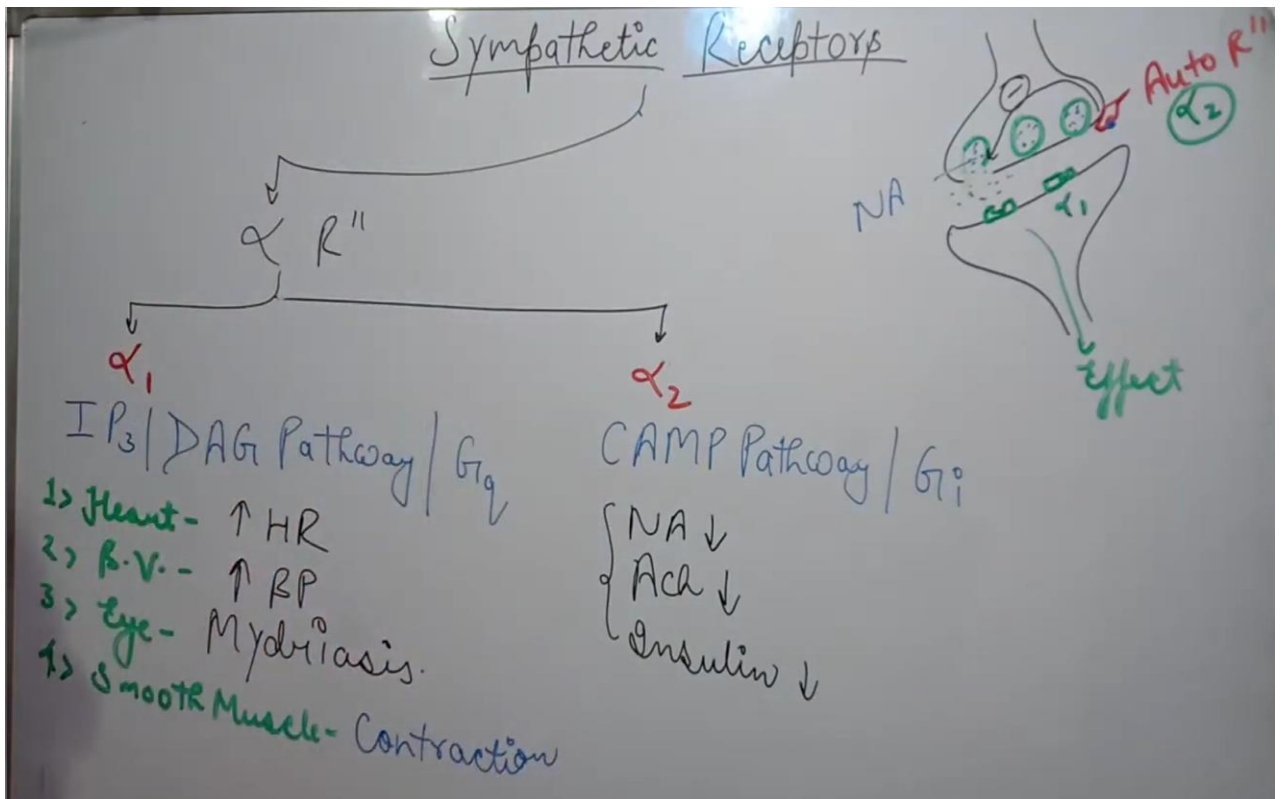
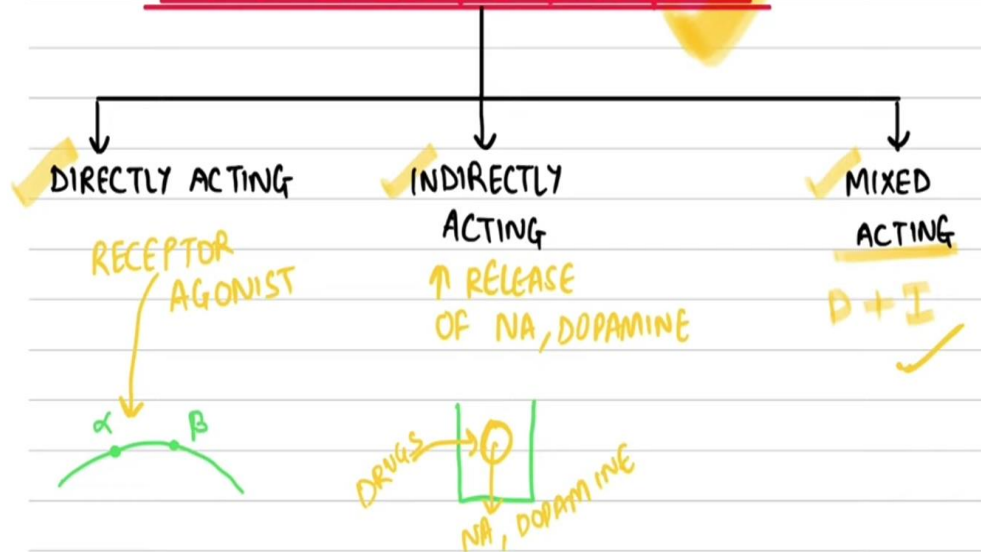


# Sympathomimetics





# ADRENERGIC DRUGS

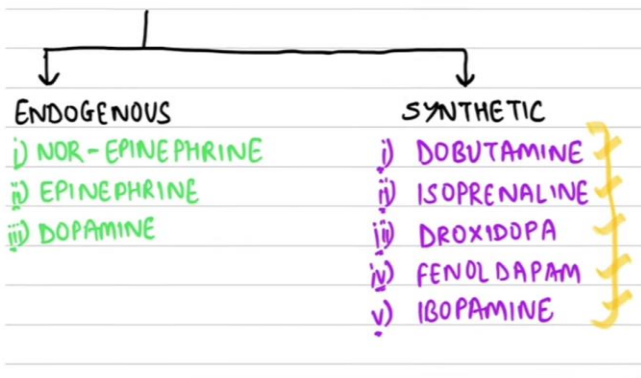


USES OF ADRENERGIC DRUGS :

- PRESSOR AGENT (VC) ✓
- UTERINE RELAXANT ✓
- NASAL DECONGESTANT ✓
- CARDIAC STIMULANTS ✓

- BRONCHODILATORS ✓
- ANORECTICS (↓Appetite) ✓
- CNS STIMULANTS ✓
- K ✗

## DIRECTLY ACTING ADRENERGIC DRUGS



⇒ INDIRECTLY ACTING ADRENERGIC DRUGS :-  
↑ Release of Catecholamines from Nerves.

MODAFINIL  
AMPHETAMINES  
TYRAMINE

⇒ MIXED ACTING ADRENERGIC DRUGS :-

↑ Release (NA, DOPAMINE)  
+  
Receptor Agonist. ( $\alpha$ ,  $\beta$ )

MEPHENTERMINE  
EPHEDRINE, PSEUDOEPHEDRINE  
DOPAMINE

→ Given by i/v infusion.

1) NOR-ADRENALINE : acts on  $\alpha_1, \alpha_2, \beta_1, \beta_3$   
(NA) (Not acts on  $\beta_2$  Receptor)

: Main action on CVS.

**USES** : i) **DOC** CARDIOGENIC SHOCK WITH  
HYPOTENSION  
ie Acute Heart Failure + SBP < 90 mmHg



2) ADRENALINE : acts on  $\alpha_1, \alpha_2, \beta_1, \beta_2, \beta_3$ .

CONCENTRATION

ROUTE

• 1mg/ml ie 1:1000

i/m ; s/c ;  
endotracheally  
(ET)

• 0.1mg/ml ie 1:10000

i/v ; i/o

**USES** : ① ANAPHYLAXIS → 0.3 to 0.5 ml of 1:1000

$\beta_1$  → CARDIAC STIMULATION ✓  
↑ H.R + ↑ CONTRACTILITY

$\alpha_1$  → VASOCONTRICION  
↑ B.P  
+  
↓ Laryngeal Oedema

$\beta_2$  → BRONCHODILATION  
↓ Release of Mediators  
from Mast cells.

② BRONCHIAL ASTHMA → 0.3 to 0.5 ml of  
1:1000  
s/c

↓  
Use is declined ∴ of dangerous  
Cardiac stimulating effect.

③ CARDIAC ARREST → 1 ml of 1:10000  
i/v

④ DURING / ALONG WITH  
LOCAL ANAESTHETICS → 1:100,000 WITH  
LIGNOCAINE

$\alpha_1$  → VASOCONTRICION  
↓  
DELAYS ABSORPTION  
OF LOCAL ANAESTHETIC  
& PROLONGS DURATION  
OF LOCAL ANAESTHESIA.

