

ANS

الجفاف	Dry <u>mouth</u>
كبر	Constipation
بارد	Bradycardia + Impotence
التهلك	فوق → Over dose

14) Side effects of Synthetic choline esters:

(سبب ضيق ... هبط علق)

X

سبب	Sweating + Diarrhea + Salivation + vomiting + lacrimation + urination - (ع من فوق 3 من كبر)
ضيق	Miosis + Bronchospasm + Abdominal colic
هبط	Hypotension + Bradycardia
علق	Skeletal muscle twitches followed by paralysis

15) Uses of Edrophonium:

(شخص عالج فرق مية ادى الكورة لتاكي كاردية)

شخص	Diagnosis
عالج	Treatment
فرق	Differentiation
مية	Myasthenia
ادى	Edrophonium (يفكر باسم الدواء)
الكورة	Curare toxicity
تاكي كاردية	Paroxysmal atrial tachycardia

16) Uses of Atropine:

(أتروبين قبل البركان ... يوسع القلب و العينان ... و يحمي بطنك يا عرقان)

أتروبين	Atropine
قبل	Pre-anesthetic medication
البركان	Parasympathomimetic toxicity + Parkinsonism
يوسع العينان	Mydriatic eye drops
القلب	Heart block - vasovagal syncope
يحمي بطنك	Anti-emetic + Peptic ulcer + Diarrhea + Nocturnal enuresis
عرقان	Over-Sweating (Hyperhydrosis) Not in Palm & Sole

17) Side effects of Atropine:

(زغلل قلبي يا محبوس حساسية وسيم و ضروس)

زغلل	Blurred vision
قلبي	Tachycardia
محبوس	Urine retention + Constipation
حساسية	Allergy
وسيم	Acute toxicity

Non-Selective α Blockers

(A) Imidazoline Derivatives

1- Tolazoline (Priscol)

imidazoline derivatives

Dynamics:

- It's a non-selective α blocker.
- It block α_1 receptors \rightarrow vasodilatation \rightarrow hypotension.
- It block pre-synaptic α_2 receptor \rightarrow increase release of noradrenaline \rightarrow discomfortable tachycardia.
- It has Histamine like action \rightarrow hypotension and bronchoconstriction.

N.B) Hypotension occurs due to blocking α_1 receptors and histamine like actions.

- A-Ch like effect \rightarrow increase gastric acidity and motility.
- Anti-Serotonin.

Uses: Peripheral vascular diseases e.g. Raynaud's disease.

Contraindications:

- 1- Hypotension
- 2- Bronchial asthma.
- 3- Peptic ulcer
- 4- Angina pectoris

6) Contraindications of Tolazoline:

(طول ما ضغطك واطى قرحة و ذبحة و أزمة تطاطى)

طول	Tolazoline
ضغطك واطى	Hypotension
قرحة	Peptic ulcer
ذبحة	Angina pectoris
أزمة	Bronchial asthma

2- Phentolamine

Dynamics \rightarrow Like tolazoline but more α blocking action & less other actions.

Uses:

- 1- Peripheral vascular disease.
- 2- Diagnosis of sustained pheochromocytoma.
- 3- Treatment of male erectile dysfunction.
- 4- Hypertension due to sympathomimetic and withdrawal of clonidine.

Phentolamine.

13) Contraindications of β blockers :

(البت قلبها داب ... أزمة وذبحه وحمل عذاب) + PVD + Never stop

البت	Beta blockers (تفكرت باسم الدواء)
قلبها	Heart block + Heart failure
داب	Diabetic patients
أزمة	Bronchial asthma
ذبحه	Variant angina
حمل	Avoided in pregnancy

THARWAT

Vasodilator β -blockers

1) Labetalol (Trandate)

- It blocks α_1 and β_1 receptors but it's more powerful as a β -blocker than α -blocker (3:1)
- It's a β_2 partial agonist (I.S.A.).
- It is weaker than Propranolol as a β -blocker & weaker than phenolamine

- Hypotensive drug due to:
 - α_1 blocking \rightarrow vasodilatation and decreases peripheral resistance.
 - β_1 blocking \rightarrow inhibits rennin secretion.

It doesn't produce tachycardia as it is a selective α_1 -blocker and also block β_2 .
 No decrease in C.O.P and No hypoglycemia.
 Used in Pheochromocytoma & peripheral vascular diseases.

2) Carvedilol

blocks both α & β receptors.

22) Side effects of Succinylcholine:

(هيبير زائد أنبيا و بين.....برادی كارديا والتنفس فين !)

هيبير	Hyperkalemia + Malignant hyperthermia
زائد	Increase I.O.P + Increase intra-gastric Pressure
أنبيا	Succinylcholine Apnea (و يفكر ك باسم الدوا)
بين	Muscle pain
برادی كارديا	Bradycardia
التنفس فين !	Respiratory failure (Preipheral)

اثر الكريات لاصح
Histamine Releasing
CNS stimulant.

Decamethonium ✓

- It is a Depolarizing N-M Blocker.
- In Therapeutic dose: No ganglion block or histamine release.
- Its elimination depends on the kidney (NO Hepatic Metabolism).
- Its antidote is Pentamethonium (Competitive Ganglion Blocker).

Dantrolene *حرق*

Dynamics:

- It's a direct skeletal muscle relaxant.
- It inhibits release of Ca²⁺ from sarcoplasmic reticulum.
- It decreases the direct excitability of skeletal muscle.
- It has very weak effect on smooth and cardiac muscles.

Uses:

- 1- Orally → Spasmolytic in spastic muscles due to neurological diseases.
- 2- I.V → in malignant hyperthermia of Succinylcholine & Halothane.

Side effects: Drowsiness, diarrhea and liver damage.

- ... insufficiency.
 - ... asthma.
 - c) Peptic ulcer.
 - d) Mechanical obstruction of the GIT and urinary bladder.
 - e) Thyrotoxicosis.
- Capot*
- mydriasis effect after*
lenses examination

	Methacholine	Carbachol	Bethanechol
Nature	Synthetic choline ester	Synthetic choline ester	Synthetic choline ester
Metabolism	Acetyl (true) C.E only	Not	Not
Orally	Irregular (Oral > S.C)	Complete (Oral- S.C)	Complete (Oral- S.C)
Muscarinic	+++	+++	+++
Nicotinic	±	+++	No
Selectivity	C, V, S (☹)	Eye (☹) GIT (☺) & U.B	GIT (☺) & U.B
Uses	<ul style="list-style-type: none"> a- TTT of Paroxysmal atrial tachycardia b- TTT of Peripheral vascular diseases c- Diagnosis of Pheochromocytoma 	<ul style="list-style-type: none"> a- In glaucoma (eye drops) b- Post-operative paralytic ileus c- Post-operative urine retention 	<ul style="list-style-type: none"> a- Post-operative paralytic ileus b- Post-operative urine retention

16) Side effects of synthetic choline esters:

(سبب ضيق --- ضبط على)

سبب	Swallowing = Diarrhoea
ضيق	Miosis = Bronchospasm = Abdominal colic
هبوط	Hypotension = Bradycardia
شلل	Skeletal muscle twitches followed by paralysis

Cevimeline:

- It's synthetic choline ester.
- Direct muscarinic agonist.
- Not hydrolyzed by cholinesterase enzyme.
- Taken orally for treatment of xerostomia (Dry mouth)

Myasthenia Gravis

Diagnosis:

- 1) Physical exam
- 2) Estimation of total antibody tit
- 3) Edrophonium test
 - 2 mg of Edrophonium injected I.V → Improvement of signs of myasthenia
 - If no improvement within 45 seconds → Inject additional 8 mg.
- 4) Neostigmine (0.5 mg) + Atropine (0.5 mg).

Treatment:

- 1) Neostigmine is (15 mg / 6 hours) is the standard drug (can be substituted by Pyridostigmine & Ambenonium).
- 2) Atropine is given before Neostigmine to block the unwanted muscarinic actions of Neostigmine as colic,
- 3) Ephedrine: - Facilitates neuromuscular transmission.
 - V.D of skeletal muscle blood vessels.
- 4) Caffeine (C.N.S stimulant that may stimulate motor areas).
- 5) Immuno-suppressive drugs as Prednisolone (Corticosteroid) and Azathioprine.
- 6) Surgical removal of thymus gland (may cause remission of 75% of cases).
- 7) Plasma-pheresis (to remove the auto antibodies against Nm receptors from the blood).

Drugs Contra-indicated in myasthenia gravis:

- A) Drugs should never be used in myasthenia: D-Penicillamine.
- B) Drugs should be used with great caution in myasthenia:
- a- General anesthesia (Halothan).
 - b- Local anesthesia (Procaine).
 - c- Aminoglycoside antibiotics (Streptomycin).
 - d- Anti-psychotics (Chlorpromazine).
 - e- Anti-arrhythmic drugs (Quinidine, Procainamide, C.C.B & β blockers)
 - f- Narcotics.
 - g- Skeletal muscle relaxants.
 - h- Trimethadone.

18) Treatment of myasthenia gravis:

(جددى القطرة بالمية.... لو كفت شيلى البلازما يا صبيه)

جددى	(New) → Neostigmine
القطرة	Atropine
المية	Myasthenia (تفكر باسم المرض)
لو	(If) → Ephedrine
كفت	Caffeine
شيلى	Surgical removal <i>of thymus</i>
البلازما	Plasmaphoresis
صبيه	Immuno-Suppressor drugs

to the active site of the cholinesterase enzyme by an ionic bond and the drug is brief (about 5-10 min.).

Actions: It is a skeletal muscles stimulant, more specific than neostigmine and a ganglion stimulant.

Administration: - By IV injection, producing immediate onset, and short duration of action (about 5 minutes).

Excretion: excreted unchanged in urine.

- a- Diagnosis of myasthenia gravis.
- b- Treatment of myasthenic crisis.
- c- Differentiation between myasthenic crisis and cholinergic crisis (Weakness due to overtreatment with anticholinesterases). It aggravates cholinergic crisis but improves myasthenic crisis.

Uses

Myasthenic crisis	Cholinergic crisis
<ul style="list-style-type: none"> - Occurs due to undertreatment of myasthenia gravis → ↓ A-Ch and paralysis. - It's improved by edrophonium. 	<ul style="list-style-type: none"> - Occurs due to overtreatment of myasthenia gravis → ↑ A-Ch and depolarizing block. - It's worsened by edrophonium.
<p>d- Curare poisoning: it has to be repeated if used alone due to its short duration of action. ↑ Ach in N. → IV infusion.</p>	
<p>e- Paroxysmal atrial tachycardia.</p>	

17) Uses of Edrophonium:

(شخص ادى العلاج و ضيف ... مية و كورة و قلب عنيف)

شخص	Diagnosis of .. myasthenia gravis
ادى	Edrophonium (يفكر ك باسم الدواء)
العلاج	Treatment of .. myasthenic crisis
ضيف	Differentiation between .. myasthenic cr - cholinergic
مية	Myasthenia
كورة	Curare toxicity
قلب عنيف	Paroxysmal atrial tachycardia

paroxysmal atrial tachycardia

9) Treatment of acute (sever) attack of migraine headache:

(قهوة دوبل و 100 ذل سوما أرجوك أبويا ده فل)

قهوة	<u>Caf-ergot</u> (يفكرك انه علاج صداع)
دوبل	(Di) → <u>Dihydro-ergotamine</u> + <u>Diazepam</u>
100	<u>Metoclopramide</u>
ذل	<u>Zolmetryptan</u>
سوما	<u>Sumatryptan</u>
ارجوك	<u>Ergotamine</u>
أبويا ده	<u>Opioid Analgesics</u>

10) Prophylactic Treatment of migraine headache:

(كله يسيب ميسى.... ألفا وبيتا و احباط منسى)

كله	<u>Clonidine</u> + Ca^{+2} channel blockers
يسيپ	<u>Cyproheptadine</u> = Pizotifen
ميسى	<u>Methysergide</u>
ألفا	α_2 agonists
بيتا	β blockers
الاحباط منسى	Anti-depressants + Anxiolytics

(Illustrated)



... humor synthesis → reduction of intraoc

... resp ... for formation of about 80 % of aqueous humo

Pharm

...epileptic ... in petit mal epilepsy.

... exact role of C.A.Is in epilepsy is still unknown but may be de

... increased local CO_2 tension and acidosis in C.N.S → depression

... epileptic focus.

Uses

1. Treatment of glaucoma. *
2. Treatment of metabolic alkalosis (when other measures fail).
3. Alkalinization of urine to enhance the excretion of weakly acidic drugs (e.g. salicylates).
4. As adjuvant in treatment of epilepsy.
5. Hyperphosphatemic states.
6. Rarely used as diuretics.

Adverse Effects

1. Metabolic acidosis (due to reduction in bicarbonate stores).
2. CNS depression following large dose → drowsiness and paraesthesia.
3. Hypersensitivity reactions → fever, skin rash & bone-marrow depression.
4. Precipitate hepatic encephalopathy.
5. Renal stones (phosphaturia and hypercalciuria).
6. Teratogenicity (in animals).

N.B) They are contra-indicated in: - Allergy. - Liver cirrhosis. - Pregnancy.

Side effects Of Carbonic Anhydrase Inhibitors (C.A.Is):

(الكاربون طار ... اغماء بحصوة ... و حساسية فى انهيار)

الكاربون	Metabolic Acidosis. + يفكرك باسم الدواء
طار	Teratogenicity.
اغماء	C.N.S depression + Hepatic <u>Encephalopathy</u> .
حصوة	Renal stones.
حساسية	Hypersensitivity.

3) Sympathomimetics:

- Adrenaline (0.05-2 %).

Dipivefrin (0.1 %).

Dipivefrin is stable lipophilic more than adrenaline and it acts as a prodrug as it is converted to adrenaline so can be used in small concentration.

They cause V.C \longrightarrow decrease aqueous formation and facilitates drainage of aqueous humour.

4) α_2 agonists:

- Apraclonidine.

- Brimonidine.

- They decrease aqueous humour via V.C of ciliary blood vessels and increasing uveoscleral outflow

5) Carbonic anhydrase inhibitor:

• Systemic: Acetazolamide.

• Topical:

- Dorzolamide 2% & Brinzolamide.

• They decrease aqueous humour formation.

6) Guanethidine (10 % eye drops):

- It produces miosis \longrightarrow increase drainage of aqueous humour.

- May be used alone or with adrenaline.

7) Prostaglandins (Latanoprost PGF_2):

- They increase uveoscleral outflow.

- They may cause irreversible brown pigmentation of iris & eyelashes.

23) Treatment of Open Angle Glaucoma:

(كورة العين فيها مية يا أبو تامر ... سيب العربية بره و غامر)

كورة العين	أجوان \longrightarrow Guanethidine
فيها مية	Glaucoma تفكر ان الاسكيمة بتاعة العين
أبو تامر	Physostigmine
سيب العربية	Miotics
بره	Beta blockers
	Timolol \longrightarrow دلعه (تيمو)
	Sympathomimetics
	Carbonic anhydrase inhibitors ... كار
	Prostaglandin + Apracinodin + Brimonidin

19) Uses of Atropine:

(أتروبين قبل البركان ... يوسع القلب و العينان ... و يحمي بطنك يا عرفان)

أتروبين	Atropine
قبل	Pre-anesthetic medication
البركان	Parasympathomimetic toxicity • Parkinsonism
يوسع العينان	Mydriatic eye drops
القلب	Heart block
يحمي بطنك	Anti-emetic • Peptic ulcer • Biliary colic • Diarrhea • Nocturnal enuresis
عرفان	Over-Sweating (Hyperhidrosis)

20) Side effects of Atropine:

(رغلل قلبي يا محبوس... حساسية وسم و ضروس)

رغلل	Blurred vision
قلبي	Tachycardia
محبوس	Urine retention • Constipation
حساسية	Allergy
سم	Acute toxicity
ضروس	Dry mouth

21) Contraindications of Atropine:

(بعد الأزمة كان مشلول في البروستاتا ... العين حساسة و القلب مش تانا)

بعد	After neostigmine
الأزمة	Bronchial asthma
كان	Constipation
مشلول	Paralytic ileus
في	Fever
البروستاتا	Senile prostatic hyperplasia
العين	Glaucoma
حساسية	Allergy
قلب مش تانا	Tachycardia

7) Uses of Phenoxybenzamine:

(فينو البرفان....صدمة عرييه والبروستاتا كمان)

فينو	Phenoxybenzamine + Pheochromocytoma
البرفان	P.V.D <i>peripheral vascular disease</i>
صدمة	Shock
عرييه	Car \rightarrow Carcinoid tumor
البروستاتا	Prostatic hyperplasia

Selective α_1 Blockers

1- Prazosin

Kinetics

Absorption:

- Well absorbed orally (Oral bioavailability is about 50%).

Distribution: Can pass B.B.B.

Fate:

- Extensively metabolized in the liver.

- Excreted in urine.

- Half-life is normally about 3-4 hours.

Vasodilatation occurs due to:

- Selective α_1 blocking.

- Inhibition of phosphodiesterase enzyme \rightarrow increase both c.AMP. & c.GMP \rightarrow increased free calcium \rightarrow relaxation of vascular sm. muscle

2) It is a Mixed dilator (Vasodilatation of both Arteries & Veins):

a- Arteriodilatation \rightarrow decrease peripheral resistance \rightarrow decrease of afterload.

b- Veinodilatation \rightarrow decrease V.R with \rightarrow decrease preload & C.O.P

c- Decrease of both systolic & diastolic blood pressure.

N.B)

• There is No discomfortable tachycardia due to:

a) Selective α_1 block with no block of presynaptic α_2 \rightarrow no release of endogenous Ndradrenaline (N.A).

b) Tachycardia produced by c.AMP is antagonized by...

Dynamics

TAKRAT

Contra-indications

- 3- Prinzmetal (Variant) Angina.
- 4- Peripheral Vascular Disease (PVD).
- 5- Bronchial Asthma.
- 6- Diabetic patients treated by insulin.
- 7- Never stopped suddenly to avoid rebound effects.
- 8- Better avoided in pregnancy (fetal bradycardia and hypoglycemia).

Drug Interactions

- 1- HME inducer as Phenobarbital increases its metabolism.
- 2- HME inhibitor as cimetidine decreases its metabolism.
- 3- β -blockers decrease hepatic blood flow \rightarrow decreased metabolism of other drugs (lidocaine).
- 4- β -blockers + verapamil \rightarrow severe cardiac inhibition.
- 5- NSAID antagonize anti-hypertensive effect of β -blockers.
- 6- β -blockers augment hypertension of adrenaline and clonidine withdrawal.
- 7- β -blockers augment hypoglycemia of insulin and sulphonylurea.

11) Uses of β blockers:

(يا بت...إنتى قلبى... وإنتى عقلى.... وإنتى عنيا بردو بالعند فيكو)

بت	Beta blockers (تفكرك باسم الدواء)
إنتى	Anti-hypertension + Anti-Angina + Anti-arrythmia
قلبى	Heart Failure + Mild myocardial infarction
عقلى	C.N.S (Tremors , migraine , Anxiety) + Thyrotoxocosis
عينى	Glaucoma
بردو	Portal hypertension
فيكو	Pheochromocytoma

12) Side Effects of β blockers :

(البت بردانه فى الازمات ... وكلامها واقف تحت النظرات)

البت	Beta blockers (تفكرك باسم الدواء)
بردانه	بردانه \rightarrow Cold extremities + برد \rightarrow Bradycardia + انه \rightarrow Angina.
فى	فى \rightarrow Failure + فى \rightarrow in \rightarrow Inhibition of H.M.E
الازمات	Acute bronchial <u>asthma</u> in Asthmatics
كلامها	Hyperkalemia
واقف	Sudden <u>Stop</u> \rightarrow rebound increased heart rate
تحت	Deep \rightarrow Depression + تحت \rightarrow Hypoglycemia
نظرات	<u>Nausea</u> & vomiting

✓ → uses

X → side effect

XX → Contraindication

5) Uses of Amphetamine:

(أمين عقله انهار...! وزنه زاد و كحول ف بار... والبول سخن نار) ✓

أمين	Amphetamine (يفكر باسم الدواء)
عقله انهار	Attention deficit + Psychic depression + Mental fatigue
وزنه زاد	Obesity
كحول	Chronic Alcoholism
بار	Parkinsonism (Depression)
البول	Nocturnal enuresis
بار	Narcolepsy (attacks of sleeping)

6) Contraindications of Tolazoline: X X

XX (طول ما ضغطك واطى قرحة و ذبحة و أزمة تطاطى) ✓

طول	Tolazoline
ضغطك واطى	Hypotension
قرحة	Peptic ulcer
ذبحة	Angina pectoris
أزمة	Bronchial asthma

7) Uses of Phenoxybenzamine: ✓

(فينو البرقان... صدمة عربيه والبروستاتا كمان) ✓

فينو	Phenoxybenzamine + Pheochromocytoma
البرقان	P.V.D
صدمة	Shock
عربيه	Car → Carcinoid tumor
البروستاتا	Prostatic hyperplasia

8) Side effects of Ergot alkaloids:

(أرجوك الآن ترجع الهايبر و تسقط الجان) X

أرجوك	Ergot (يفكر باسم الدواء)
الآن	Angina Pectoris
ترجع	Nausea & vomiting
الهايبر	Hypertension + Hypertension
تسقط	Abortion
الجان	Gangrene

9) Treatment of acute (sever) attack of migraine headache:

(قهوة دويل و 100 ذل سوما أرجوك أبويا ده فل)

قهوة	Caf-ergot (يفكر انه علاج صداع)
دويل	(Di) → Dihydro-ergotamine + Diazepam

Schemes Of A.N.S

1) Uses of Adrenaline:

أنا أدري بقلب رحمة ياهيما..... غيبوبة وأزمة وعين سليمة ✓

أنا	Anaphylactic shock + With local Anesthetics
أدري	Adrenaline (يفكرك باسم الدواء)
بقلب	Complete heart block + Cardiac resuscitation
رحمة... (الرحم)	Uterus contraction
ياهيما	Haemostatic in epistaxis
غيبوبة	Acute hypoglycemic coma
أزمة	Acute bronchial asthma
عين	Open angle glaucoma (V.C)

2) Side effects of Adrenaline:

(هبير جان.... رعشة وأريزميا وآن) X

هبير	Hypertension
جان	Gangrene
رعشة	Tremors
أريزميا	Arrhythmia
آن	Angina + Anxiety

3) Uses of Ephedrine:

(لو حساس للأزمة أو واطى..... نزل عينك و اتبول لا ارادى) ✓

لو	(IF) → Ephedrine (يفكرك باسم الدواء)
حساس	Allergy (Anti)
للأزمة	Bronchial asthma
واطى	Hypotension
نزل	Nasal decongestion
عينك	Mydriatic eye drop
اتبول لا ارادى	بول → مية → Myasthenia gravis Nocturnal enuresis + hyper-Kinetic syndrome

4) Side effects of Ephedrine:

(زى الأدرينالين وانسى طول اليورين) X

زى الأدرينالين	As Adrenaline (اشرح)
انسى	Insomnia
طول	Tolerance
اليورين	Urine Retention

100	Metoclopramide
دال	Zolmetriptan
سوما	Sumatryptan
ارجوك	Ergotamine
اوپيويده	Opioid Analgesics

10) Prophylactic Treatment of migraine headache:

(كله يسبب ميسى...ألفا وبيتا و احباط منسى)

كله	Clonidine + Ca ²⁺ channel blockers
بسيب	Cyproheptadine = Pizotifen <i>Anti serotonin</i>
ميسى	Methysergide
ألفا	α ₂ agonists
بيتا	β blockers
الاحباط منسى	Anti-depressants + Anxiolytics

11) Uses of β blockers:

(يا بت...إنتى قلبى...وإنتى عقلى...وإنتى عنيا بردو بالعند فيكو) ✓

بت	Beta blockers (تفكرك باسم الدواء)
إنتى	Anti-hypertension + Anti-Angina + Anti-arrythmia
قلابى	Heart Failure + Mild myocardial infarction
عقلية	C.N.S (Tremors , migraine , Anxiety) + Thyrotoxicosis
عيني	Glaucoma (عى)
بردو	Portal hypertension
فيكو	Pheochromocytoma

12) Side effects of Reserpine:

(رزق انتظر الكابوس.....دماغ و صدر بطن و نوز) X

رزق	Reserpine (يفكرك باسم الدواء)
انتظر	(Wait) → Weight gain + (Parking) → Parkinsonism
الكابوس	Nightmares
دماغ	C.N.S → Psychic depression (due to ↓ NA& Serotonin)
صدر	Increased prolactine + Bradycardia
بطن	Diarrhea + Peptic Ulcer
نوز	Nasal Congestion

13) Side effects of Clonidine:

(كل سد الحنك و كن بارد فى الفك) X

كل	Clonidine (يفكرك باسم الدواء)
سد	Sudden stop + Sedation

Contra-Indications

- 1- Peripheral vascular disease (P.V.D).
- 2- Hypertension
- 3- Angina pectoris.
- 4- Pregnancy.
- 5- Liver and kidney diseases.

THARWAT

N.B) Dihydroergotamine → similar to ergotamine but:

- ✓ - Less toxic.
- ✓ - More potent as α blocker.
- ✓ - No partial agonist on α receptors.
- ✓ - Used in treatment of acute migraine attack.

8) Side effects of Ergotamine:

(أرجوك الآن ترجع الهايبر و تسقط الجان)

أرجوك	Ergotamine (مفكرك باسم الدواء) + Ergotism
الآن	Anginal pain
ترجع	Nausea & vomiting
الهايبر	Hypertension + Hyperpyrexia (fever)
تسقط	Abortion
الجان	Gangrene

Ergometrine

❖ Dynamics:

- ✓ 1- Powerful oxytocic.
- ✓ 2- Weak vasoconstriction.
- ✓ 3- Has no α-blocking activity.
- ✓ 4- Has no β-blocking activity.

After labor
(P.P.P.H)

❖ Uses:

- After labor (prevent post-partum hemorrhage and help involution of uterus)

❖ Side effects: Hypertension.

N.B) Methyl ergometrine (Methergine):

صراوس	Dry mouth
18) Contraindications of Atropine: (بعد الازمة كان مشلول فى البروستاتا العين حساسة و القلب مش تاتا)	
بعد	After neostigmine
الأزمة	Bronchial asthma
كان	Constipation
مشلول	Paralytic ileus
فى	Fever
البروستاتا	Senile prostatic hyperplasia
العين	Glaucoma
حساسية	Allergy
قلب مش تاتا	Tachycardia
19) Treatment of myasthenia gravis: (جددى القطرة بالمية.... لو كفت شيلى البلازما يا صبيه)	
جددى	(New) → Neostigmine [15mg / 6hr]
القطرة	Atropine
المية	Myasthenia (تفكر باسم المرض)
لو	(If) → Ephedrine ↑ N.A. Transmission & U.D.
كفت	Caffeine
شيلى	Surgical removal
البلازما	Plasmaphoresis
صبيه	Immuno-Suppressor drugs prednisolone
20) Side effects of Succinylcholine: (هبير زائد أنبيا و بين.... برادى كارديا والتنفس فين !)	
هبير	Hyperkalemia + Malignant hyperthermia
زائد	Increase I.O.P + Increase intra-gastric Pressure
أنبيا	Succinylcholine Apnea (و يفكر باسم الدواء)
بين	Muscle pain
برادى كارديا	Bradycardia
التنفس فين !	Respiratory failure (Preipheral)

Case 10 # (Drugs contraindicated in myasthenia Gravis)

1) contraindicated 1) prednisolone

2) with caution → Antibiotic : Aminoglycoside (Streptomycin)

→ Cvs Drugs: Quinidine - P. Blocker - Calcium Blocker - procainamide

→ muscle relaxant

→ hypnotics

→ local anaesthetic

→ Transthyalidone

(5)

CHEMOTHERAPY



(14) Side effects of Sulphonamides:

كرسى حديد

كرسى	Crystallurea
حديد	(Sulph)onamides → Sulpher معدن → حديد

(15) Side effects of Trimethoprim:

Tri(met)hoprim → Megaloplastic anemia

(16) Side effects of Isoniazid:

زياد دماغه تعبانه

زياد	Isoniazid (يفكرك باسم الدواء)
دماغه تعبانه	Neurotoxicity as Optic neuritis & Preipheral neuritis.

(17) Side effects of Rifampicin:

الريف الاحمر

الريف	Rifampicin (يفكرك باسم الدواء)
الاحمر	Red discoloration of urine and other body secretions.

(18) Side effects of Metronidazole:

المترو الاحمر سبق العربيه

المترو	Metronidazole (يفكرك باسم الدواء)
المترو	Metalic taste + Headache + Vomiting. (لما بتركب المترو بتدوخ و ترجع)
الاحمر	Red brown discolorations of urine.
سبق	Suppress the immunity
العربية	Car → Carcinogenicity.

(19) Side effects of Interferon:

انت كنت فين يا قلبى

انت	Interferon (يفكرك باسم الدواء)
انت	Influenza
كنت	Confusion
فين	Nephrotoxicity (اعكس فين: نيف)
فين قلبى	Cardiotoxicity
ألبى	Alopecia

(20) Uses of Methotrexate:

ميسى بيلف ويباصى ل سواريز

ميسى	Methotrexate (يفكرك باسم الدواء) + Immunosuppressive
بيلف	Lymphocytic leukemia
باصى	Chorionic Epitheloma
سواريز	Sever Psoriais.

(4) Uses of Erythromycin:

إريك مش بتاع كلام وبتاع نوم... حباية بديل ويدفى طول اليوم

إريك	Erythromycin (يفكرك باسم الدوا)
كلام	Chlamydial infection
ويتاع	Whooping cough
نوم	Pneumonia
حباية	Acne vulgaris
بديل	Penicillins substitute in allergic patient
يدفى	Diphtheria

(5) Uses of Chloramphenicol:

Chlor(amphe)nicol أنفى (ANVE)

AN	Anaerobic & Aerobic (mixed infection).
V	Vancomycin resistant enterococci.
E	Ear & Eye infection.

(6) Side effects of Chloramphenicol:

العيل شرب كلور و رجع دم

العيل	Gray baby syndrome
كلور	Chloramphenicol (يفكرك باسم الدوا)
دم	Blood: Agranulocytosis - Aplastic Anaemia - Haemolytic Anaemia.

(7) Uses of Aminoglycosides:

أمين استلف من سيد طبلة

أمين	Aminoglycosides (تفكرك باسم الدوا)
استلف	Staph. Aureus
سيد	Pseudomonas aeruginosa.

(8) Side effects of Aminoglycosides:

أمين استلف من سيد طبلة

أمين	Aminoglycosides (تفكرك باسم الدوا)
سيد (حمدى)	كورة → Curare like action → Skeletal muscles relaxation
طبلة	Ear drum → Ototoxicity

(9) Uses of Tetracyclines:

كلام العين دايمًا راقى... مين فينا جلده باقى

كلام	Chlamydial infection
العين	Eye infection
دايمًا	Democlocycline used in inappropriate release of ADH
راقى	Rickettsial infection
مين	Minocycline used to eradicate Meningococcal carrier + Amoebiasis
فينا	Venereal disease
جلده	Skin infection

(10) Side effects of Tetracyclines:

اربع سنان فى الودان

اربع	Tetracyclin (بفتركة باسم الدواء)
سنان	Teeth & bone abnormalities.
فى	In → Insipidus
الودان	Vestibular disturbances

(11) Uses of Quinolones (Ciprofloxacin):

سبب سنو و منجنيتيس

سبب	Ciprofloxacin (بفتركة باسم الدواء)
Ci(pro)floxacin	Prostatitis.
سنو	Osteomyelitis + Otitis externa (Malignant)
جنى	Gonorrhea

(12) Side effects of Quinolones (Ciprofloxacin):

كين

كين	Quinolones (بفتركة باسم الدواء)
كين	Connective tissue problems as Chondrolytic & Rupture tendon
كين	Confusion + Convulsion

(13) Uses of Sulphonamides:

بستلف من تحت و فوق... ماله التاكسى وشغل السوق

بستلف	Sulphonamides (بفتركة باسم الدواء)
فوق	Eye infection
ماله	Malaria
التاكسى	Toxoplasma
السوق	Skin infection