



## Pharmacology Testbank

However, there are always two sides to a coin. Being a doctor is extremely rewarding. It always was and it will continue to be so. Making challenging diagnosis, helping patients deal with and overcome devastating illnesses, and comforting families after a loss of a loved one - these are powerful emotional experiences that a doctor faces every single day.

No other profession can provide such profound sense of fulfillment like medicine. Those who have an inquisitive mind and a quest for learning, medicine is their journey to embark upon, with its endless opportunities.

## 2022-2023

Undoubtedly, it is still the best profession to be able to give back to society. Being a doctor empowers you to be able to do something for the sick and ailing, instead of just watching helplessly. The feeling that your knowledge or actions can help someone and society at large - is what makes this job so immensely satisfying.





-----Uses to Antihypertensive  
,Benign prostatic hyperplasia ( BPH) Blocks  $\alpha_1$   
in bladder trigone & prostate & decreases  
tone & Improves urine flow with no or little  
tachycardia .

A Prazosin

B Doxazosin

C Phenoxybenzamine

about Distribution of Cholinoceptor -Blocking  
Drugs , Atropine and the other **tertiary agents**  
**are widely** distributed ,**Scopolamine is rapidly**  
**and fully** distributed into the CNS and the  
**quaternary derivatives are poorly** taken up by  
the brain

A true

B false

----- is a alpha-1 agonist commonly used as a decongestant in the form of a nasal spray.

A phenylephrine

B Dopamine

C Midodrine

Let's  
GO!

not true about Tacrine ?

A Tacrine's efficacy is modest, and hepatic toxicity is not significant.

B used for the treatment of mild to moderate Alzheimer's disease.

C is an anticholinesterase

true about **Yohimbine** ?

- A An indole alkaloid, is a 2-selective antagonist.
- B treatment of orthostatic hypotension
- C all are true
- D Was widely used to improve male erectile dysfunction
- E Enhances sexual activity – aphrodisiac

Phenylephrine is an alpha-1 adrenergic agonist used in ocular procedures as it causes (miosis/mydriasis) ----- .

- A miosis
- B mydriasis

Beta (1/2/3) ----- adrenergic receptors are present on adipose tissue, where they stimulate lipolysis by fat cells.

A 2

B 1

C 3

In the kidneys, beta (1/2/3)----- adrenergic receptors promote renin release.

A 3

B 2

C 1

not true about Sulphonamides ?

- A its Toxicity cause Nausea , Rashes , Blood dyscrasia
- B induce normal bacterial utilization of PABA for the synthesis of folic acid
- C Precipitation ( crystallization) in urinary tract and stone formation are toxicity result
- D Almost obsolete nowadays because of: – Bacterial resistance & bacteriostatic
- E the important feature is that the sulfur is linked directly to the benzene Ring

Muscarinic receptor subtypes M2 and ----- inhibit the activity of adenylyl cyclase, leading to decreased levels of cyclic AMP.

A M5

B M4

not true about **Varenicline** in Nicotine?

- A It prevents the stimulant effect of nicotine at presynaptic nicotinic receptors
- B its use is limited by exacerbation of psychiatric illnesses, including anxiety and depression.
- C It dissimulates basal mesolimbic dopamine release
- D its use is limited by nausea and insomnia

Cevimeline is A new direct-acting muscarinic agonist used for the treatment of dry mouth associated with Sjögren's syndrome

A true

B false



Beta (1/2/3) ----- adrenergic receptors increase contractility in the ventricular muscle of the heart.

A 1

B 2

C 3

in Urinary Disorders , we use ----- as symptomatic relief in the treatment of urinary urgency

A Oxybutynin - urologic surgery  
Darifenacin - urinary incontinence

B Almost obsolete nowadays because of: – Bacterial resistance & bacteriostatic

C It releases NE & activates  $\beta_2$  receptors directly. it is a mild CNS stimulant



Edrophonium is used as a diagnostic test for myasthenia , A -----mg dose is injected IV. If the patient has myasthenia gravis, an improvement in muscle strength that lasts 5 minutes can be observed.

A 10

B 2

C 5

D 20

M3 contracts all of the following except ?

A bronchiolar smooth muscle

B ciliary muscle

C bladder wall

D sphincter

Alpha (1/2) ----- adrenergic receptors act by inhibiting adenylyl cyclase.

A 2

B 1

Alpha (1/2) ----- adrenergic receptors, when activated, decrease intracellular cyclic AMP concentration.

A 2

B 1

Nausea and vomiting are the most commonly observed adverse effects of nitrofurantoin

A true

B false

which one is true about Sulphonamides  
Cotrimoxazole- Trimethoprim Combination ?

A Very effective fixed combination.  
Very useful in UTI, RTI, Salmonella,  
and Pneumocystis pneumonia

B One of the few, still used, sulfa drugs.

C all are true

D Bactrim, Septrin, Balakatin

E No resistance.  
an opportunistic infection in AIDS  
patients

Pilocarpine is ?

A Glaucoma Initial therapy which  
consists of a combination of a  
direct muscarinic agonist and a  
cholinesterase  
inhibitor

B all of the above

C replaced by topical  $\beta$ -  
blockers and prostaglandin  
derivatives

D Used to increase salivary secretion.



Atropine causes some bronchodilation & reduce secretion, in treating bronchial asthma is limited because block of **autoinhibitory M2** oppose the bronchodilation caused by **block of M3** receptors on airway

A false

B true

note true about **Ephedrine** ?

A It releases NE & activates  $\beta_2$  receptors directly. it is a mild CNS stimulant

B Oral ephedrine or pseudoephedrine are useful in the treatment of stress incontinence

C has been used in traditional Chinese medicine

D isn't used as a pressor agent during spinal anesthesia

E is treatment of asthma, hay fever & the common cold

Norepinephrine (increases/decreases) -----  
-- blood flow to skeletal muscle.

A decreases

B increases

the hypotensive effect can be blocked by at-ropine

A false

B true

Phenylephrine is a(n) (alpha-1/alpha-2)-----  
- receptor selective adrenergic agonist.

A alpha-2

B alpha-1

Donepezil is better than Tacrine because of its long half-life, and it lacks the hepatotoxic effect of tacrine

A false

B true

NOT AN adverse effect of the Beta-Receptor Antagonist Drugs ?

A mild sedation, vivid dreams, and rarely, depression

B Coolness of hands and feet in winter.

C cardiac conduction abnormalities with the calcium antagonist verapamil

D frequent hypoglycemic reactions in insulin dependent diabetic patients

E worsening of preexisting asthma of B1 blockers



Clonidine could most likely be involved in the management of which of the following diseases or disorders?

- A Febrile Seizures
- B Attention Deficit Hyperactivity Disorder (ADHD)
- C Stevens-Johnson Syndrome
- D Acute bacterial endocarditis

What mechanism of action or pharmacological action is best associated with clonidine?

- A Beta 2 Agonist
- B Alpha-1 Agonist
- C Alpha-2 Agonist
- D Alpha-1 Blocker

Beta-2 adrenergic receptors are present in vascular smooth muscle within skeletal muscle, where they induce (contraction/relaxation) ----- .

A relaxation

B contraction

BELIEVE IN  
YOURSELF

Propranolol reduces ?

A the frequency and intensity of migraine headache.

B thyroid storm (severe hyperthyroidism)

C performance anxiety

D certain tremors

E reduce all of the above

which one is Lipophilic  $\beta$  blocker ?

A atenolol

B acebutolol

C bisoprolol

D oxprenolol

E sotalol

not Lipophilic  $\beta$  blocker ?

A metoprolol

B oxprenolol

C carevdilol

D nadolol

E propranolol



Activation of alpha-1 adrenergic receptors on vascular smooth muscle typically results in (vasodilation/vasoconstriction -----)

A vasodilation

B vasoconstriction

soman, sarin, VX induce effects rapidly like Miosis, salivation, sweating, bronchial constriction, vomiting, and diarrhea which their Therapy always includes ?

A decontamination to prevent further absorption

B atropine parenterally in large doses, given as often as required to control muscarinic excess.

C all are true

D treatment with pralidoxime, and benzodiazepines for seizures.

E maintenance of vital signs

The effects of Pilocarpine and the choline esters over dosage are all blocked competitively by **atropine**

A false

B true

Beta1-selective antagonists are preferred in patients with :

A peripheral vascular disease

B asthma

C all of them

D diabetes

Quinolones available for use are containing a carboxylic acid moiety at position ----- of the primary ring structure

A 2

B 3

C 4

Oral **ephedrine or pseudoephedrine** are useful in the treatment of stress incontinence which is ?

A o inhibits reuptake of **NE** and blocks histamine (**H1**), **ACh**, and serotonin receptors.

B Glaucoma Initial therapy which consists of a combination of a direct muscarinic agonist and a cholinesterase inhibitor

C loss of small amounts of urine associated with coughing, laughing, sneezing, exercising or other movements that increase intraabdominal pressure and thus increase pressure on the bladder

NOW  
or  
NEVER

-----is used in the temporary emergency management of complete heart block

A Oxymetazoline

B Ritodrine

C Isoproterenol

D Dobutamine

which one is a mismatch Relative Receptor Affinities ?

A Phenylephrine, methoxamine  $\alpha_1 > \alpha_2$

B Epinephrine  $\alpha_1 > \alpha_2$ ;  $\beta_1 > \beta_2$

C Clonidine, methylnorepinephrine  $\alpha_2 > \alpha_1$

D Norepinephrine  $\beta_1 \gg \beta_2$

E Dobutamine  $\beta_1 > \beta_2$



which of the following organs receive dual innervation ?

A piloerector muscle of hair

B hypothalamus

C sweat gland

D adrenal medulla

Beta 2 adrenergic receptors are present on the wall of the gastrointestinal tract, on bladder wall and on bronchioles, where they induce (contraction/relaxation) ----- .

A contraction

B relaxation

not true about Phenoxybenzamine ?

- A o inhibits reuptake of **NE** and blocks histamine (**H1**), **ACh**, and serotonin receptors.
- B Adverse effects :Orthostatic hypotension, tachycardia, Nasal stuffiness and inhibition of ejaculation
- C treatment of pheochromocytoma, Peripheral vascular diseases, e.g. Raynaud's phenomenon
- D irreversible Non selective alpha blocker
- E well Absorbed but usually given orally
- F it reduces BP when sympathetic tone is high, as a result of upright posture.

----- Stabilized by an ionic bond at the anionic site and through **weak hydrogen bonding at the esteratic site.**

A Edrophonium

B Neostigmine

(Adrenoreceptors/cholinoreceptors) -----

- are activated by the catecholamines epinephrine and norepinephrine.

A Adrenoreceptors

B cholinoreceptors

Effects of Direct-Acting Cholinoceptor

Stimulants are decrease blood flow , miosis , contraction of bronchial muscle, and increasing motility of Gastrointestinal tract

A false

B true

the most **popular** Drugs useful in reducing intraocular pressure in glaucoma :

A prostaglandin F2 analogs & diuretics

B Cholinomimetics &  $\alpha$  agonists

C Prostaglandin analogs &  $\beta$  blockers

Beta (1/2/3) ---- adrenergic receptors are prominent in the heart.

A 3

B 1

C 2

Pirenzepine and telenzepine M1 blockers are ?

A all are true

B Gastric emptying time is prolonged, and intestinal transit time is lengthened

C Diarrhea caused by nonautonomic agents can be temporarily controlled

D Reduce gastric acid secretion with **fewer** adverse effects than atropine

E Diarrhea due to overdose with muscarinic agents is readily stopped



not an effect of Ganglion-Blocking Drugs ?

A Orthostatic or postural hypotension, diminished contractility and a moderate tachycardia

B Sedation, tremor, choreiform movements, and mental abnormalities.

C Secretion & Motility are profoundly inhibited

D all are effects of it

E Cycloplegia with loss of accommodation & moderate dilation of the pupil

F Sexual function is impaired in that both erection and ejaculation

not true about Myasthenia gravis ?

- A The antibodies reduce muscarinic receptor function.
- B Frequent findings are ptosis, diplopia, difficulty in speaking, swallowing, and extremity weakness.
- C is an autoimmune disease affecting skeletal muscle neuromuscular junctions.
- D Severe disease may affect all the muscles, including those necessary for respiration.

in Cholinergic Poisoning , 1–2 mg of atropine sulfate may be given IV every 5–15 minutes until signs of effect (dry mouth, reversal of miosis) appear. The drug is repeated many times, since the acute effects of the anti-cholinesterases may last 24–48 h

A false

B true

*seize the day*

A  
B