

PARMACOLOGY TEAM



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neurotransmitters	Increasing abnormality		Decreasing abnormality	Treatment
Acetylcholine (Muscarinic + Nicotinic receptors)	parkinson's disease مرض الرعاش		Alzheimer's disease	High = anticholinergic Low = cholinomimetic drugs
Dopamine	Schizophrenia انقسام الشخصية		<ul style="list-style-type: none"> In Nigrostriate " basal ganglia" >> Parkinson's disease In chemoreceptors >> antiemetic effect Tuberoinfundibular pathway >> hyperprolactinemia "endocrine effect " In mesolimbic >> ameliorat (make it better) Schizophrenia "advantage of decreasing the Dopamine 	High = neuroleptic drugs Low = increasing dopamine content
Norepinephrine (NEF)	Mania الجنون		Depression الاكتئاب	High = neuroleptic drugs Low = Tricyclic antidepressant
GABA (an inhibitory neurotransmitters)			Epilepsy الصرع	antiepileptic drugs
Glutamate (an excitatory neurotransmitters)	epilepsy			
serotonin	* schizophrenia * Obsessive Compulsive Disorder الوسواس القهري * Premenstrual dysphoric disorder اضطراب شديد يسبق الدورة الشهرية *generalized anxiety		Depression	High = serotonin (5-HT) antagonist Low = decrease the reuptake of serotonin
		Affective Disorders or Bipolar disorders : different episode of mood اضطراب فمه مبسوط لدرجة الجنون وممره مكتئب بقوة تعتمد على حالة المريض فإذا كان depression= decrease . mania =increase		

In this page , we will answer the questions in AL Hiadar's SLIDES :

- ◆ What will happen if Cholinergic neurotransmissions increase in CNS? **It will lead to parkinson's disease.**
- ◆ Is Acetylcholine an inhibitory or excitatory neurotransmitter? **Both .**
- ◆ Does acetylcholine has any role in the CNS?
Yes , Ach is thought to be involved in cognitive functions such as : memory, arousal and attention. It plays a role in the enhancement of sensory perception when we wake up
- ◆ What are the CNS diseases that linked to ACH derangement? **parkinson's disease , Alzheimer's disease**
- ◆ what is your simple definition of epilepsy? **Disturbance in brain stabilization between GABA and glutmate will cause to epilepsy.**
- ◆ What are the consequences of blocking dopaminergic receptors?" figure"

