

Week 1 Quiz

The amygdala is associated with anxiety and perception of odors.

The hippocampus is involved in memory and anxiety. The amygdala is associated with anxiety and perception of odors. **The prefrontal cortex is associated with executive function.** The thalamus is associated with motor command processing

The client's cognitive status can result in an ethical concern if the client is unable to self-determine care or is a danger to self or others. Ability to pay is not an ethical issue.

basal ganglia are a group of structures involved in voluntary motor movements. Basal ganglia are also involved in cognition and emotion.

Limbic system is associated with emotion and learning

hippocampi are associated with long term memory

Wernicke's area is associated with speech comprehension. Review activity

the dorsolateral prefrontal cortex (DLPFC) is concerned with higher level functioning. The VLPFC is involved with motor inhibition the IFG contains Broca's area which is associated with speech production understanding grammar. Pliska Ch. 8

the OFC is involved in decision making and social behavior with a focus on punishment and rewards. The OFC inhibits and activates the amygdala and is activated when a risk assessment is required. Some behaviors associated with the OFC include sex, sugar, pain, social humiliation, money, rewards, fame, and aggression. The amygdala will identify a threat and then the OFC will determine the risk or benefit of an action based on past experience. Pliska Ch. 8, p.158

At this time, 20 % of the world's population is suffering from a neurologic and/or psychiatric disorder.

Week 2 Quiz

G protein linked systems, one of the signal transduction cascades, pass the message from a first receptor to a second messenger .

Glutamate is an excitatory neurotransmitter. (NEI glutamate video- the glutamate sisters)

CYP 3A4 is one of the 5 most important NT which include CYP 1A2, 2D6, 2C9, 2C19, 3A4. Dosing adjustments may be required. Stahl p. 46-51.

Smoking induces CYP1A2. Stahl p.48

partial agonist- drug does not fully activate receptors; antagonist- drug binds to receptor but does not activate a response; inverse agonist- drug cause opposite effect of the agonist ;agonist- ;agonist- drug binds to the receptor and activates a biological response

G protein Linked systems and ion channel linked cascades are triggered by neurotransmitters. Stahl p. 11

Propagation of an action potential to the axon terminal is mediated by voltage-sensitive sodium channels. **Influx of sodium through voltage-sensitive sodium channels at the axon terminal leads to opening of voltage-sensitive calcium channels, also at the axon terminal.** Influx of calcium through the open voltage sensitive calcium channels leads to docking of synaptic vesicles and secretion of neurotransmitter into the synapse.

Agonists cause ligand-gated ion channels to open more frequently.

The communication between neurons at synapses is mediated by neurotransmitter molecules and is therefore chemical. Stahl p. 6

Transcription factors are proteins that bind to promoter sequences of DNA to turn gene expression on and off.

chemical neurotransmission is the foundation of psychopharmacology

NR546 Week 3

EPs manifest when dopamine receptor occupancy within the basal ganglia reaches approximately 80% as the dopamine-mediated inhibition of movement is now disinhibited (Refer to pathophysiology and the basal ganglia model of movement)Stahl p.133 . See figure 5-4

Risperidone has the highest risk for galactorrhea. Review tuberofundular pathway Stahl p.95

clozapine is documented to decrease risk of suicide in schizophrenic clients. Stahl p. 181

"Aripiprazole is associated with the lowest risk weight gain.

All pines are associated with weight gain. Though not associated with large weight gain, lurasidone is not associated with less weight gain in the same way as aripiprazole. Week 3 lecture "

Haldol is a first-generation antipsychotic, which can cause a dystonic reaction. Clozapine is one of the only antipsychotics that does not cause dystonia. The other medications are not known for causing dystonia.