
Advanced Certificate in ADHD Medication Management

Non-Stimulant Medications for ADHD

Non-stimulant medications are a common treatment option for Attention Deficit Hyperactivity Disorder (ADHD). Unlike stimulant medications, which contain amphetamine or methylphenidate, non-stimulant medications do not contain these substances. Instead, they work by affecting other neurotransmitters in the brain, such as norepinephrine and serotonin. In this explanation, we will discuss some of the key terms and vocabulary related to non-stimulant medications for ADHD.

Non-stimulant medications: Non-stimulant medications are a class of medications that are used to treat ADHD. They are called "non-stimulant" because they do not contain amphetamine or methylphenidate, which are the active ingredients in stimulant medications. Instead, non-stimulant medications work by affecting other neurotransmitters in the brain, such as norepinephrine and serotonin.

Norepinephrine: Norepinephrine is a neurotransmitter that is involved in regulating attention, arousal, and mood. It is also known as noradrenaline. Non-stimulant medications that affect norepinephrine include atomoxetine and viloxazine.

Serotonin: Serotonin is a neurotransmitter that is involved in regulating mood, appetite, and sleep. Non-stimulant medications that affect serotonin include clonidine and guanfacine.

Atomoxetine: Atomoxetine is a non-stimulant medication that is used to treat ADHD. It is a selective norepinephrine reuptake inhibitor (SNRI), which means that it increases the amount of norepinephrine that is available in the brain. Atomoxetine is taken orally, and it is usually taken once or twice a day.

Viloxazine: Viloxazine is a non-stimulant medication that is used to treat ADHD. It is a selective norepinephrine reuptake inhibitor (SNRI), which means that it increases the amount of norepinephrine that is available in the brain. Viloxazine is taken orally, and it is usually taken twice a day.

Clonidine: Clonidine is a non-stimulant medication that is used to treat ADHD. It is an alpha-2 adrenergic receptor agonist, which means that it affects the neurotransmitter norepinephrine. Clonidine is taken orally, and it is usually taken two or three times a day.

Guanfacine: Guanfacine is a non-stimulant medication that is used to treat ADHD. It is an alpha-2 adrenergic receptor agonist, which means that it affects the neurotransmitter norepinephrine. Guanfacine is taken orally, and it is usually taken once a day.

Selective norepinephrine reuptake inhibitor (SNRI): An SNRI is a type of medication that affects the neurotransmitter norepinephrine. SNRIs increase the amount of norepinephrine that is available in the brain by blocking the reuptake of norepinephrine. Atomoxetine and viloxazine are SNRIs.

Alpha-2 adrenergic receptor agonist: An alpha-2 adrenergic receptor agonist is a type of medication that affects the neurotransmitter norepinephrine. Clonidine and guanfacine are alpha-2 adrenergic receptor agonists.

Reuptake: Reuptake is the process by which neurotransmitters are taken back up into the nerve cells that released them. Reuptake helps to regulate the amount of neurotransmitter that is available in the brain.

Neurotransmitter: A neurotransmitter is a chemical that is used to transmit signals in the brain. Neurotransmitters are released by nerve cells and bind to receptors on other nerve cells.

Nerve cell: A nerve cell, also known as a neuron, is a type of cell that is responsible for transmitting signals in the brain. Nerve cells have a cell body, dendrites, and an axon.

Cell body: The cell body is the central part of a nerve cell. It contains the nucleus and other organelles that are necessary for the cell to function.

Dendrites: Dendrites are the branching extensions of a nerve cell that receive signals from other nerve cells.

Axon: The axon is the long, thin extension of a nerve cell that transmits signals to other nerve cells.

Receptor: A receptor is a protein on the surface of a nerve cell that binds to neurotransmitters. When a neurotransmitter binds to a receptor, it can cause changes in the nerve cell that lead to the transmission of a signal.

Adrenergic receptor: An adrenergic receptor is a type of receptor that binds to norepinephrine or epinephrine. Adrenergic receptors are involved in regulating attention, arousal, and mood.

Alpha-2 adrenergic receptor: An alpha-2 adrenergic receptor is a type of adrenergic receptor that is found on nerve cells in the brain. Alpha-2 adrenergic receptors are involved in regulating attention, arousal, and mood. Clonidine and guanfacine are alpha-2 adrenergic receptor agonists.

Non-stimulant medications are an important treatment option for ADHD. They work by affecting neurotransmitters in the brain, such as norepinephrine and serotonin. Some non-stimulant medications, such as atomoxetine and viloxazine, are selective norepinephrine reuptake inhibitors (SNRIs), which increase the amount of norepinephrine that is available in the brain. Other non-stimulant medications, such as clonidine and guanfacine, are alpha-2 adrenergic receptor agonists, which affect the neurotransmitter norepinephrine. By understanding the key terms and vocabulary related to non-stimulant medications, healthcare professionals can provide effective treatment for patients with ADHD.