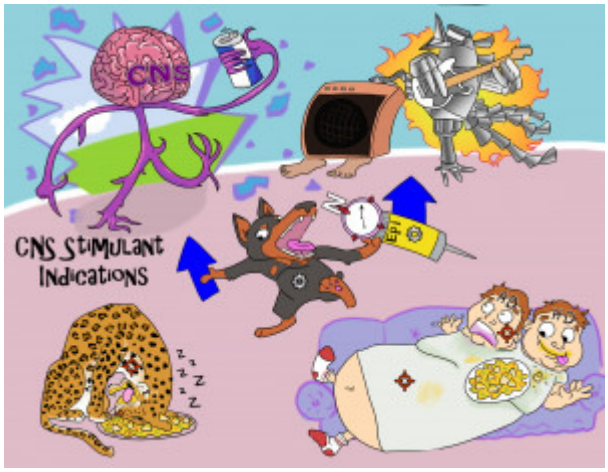
CNS Stimulant Indications

Amphetamines are CNS stimulants that promote neurotransmitter release and enhance neuronal excitation. This classification of drugs bind to adrenergic receptors that normally attach to neurotransmitters, such as norepinephrine, epinephrine, and dopamine. These medications are indicated for patients with ADHD, obesity, and narcolepsy. However, CNS stimulants have a high potential for abuse and are not recommended for the purpose of weight loss.



PLAY PICMONIC

Drug Names

Amphetamine
Amp-feet
Amphetamine salts are a controlled CNS stimulant medication used to treat obesity and ADHD. Off label uses of this drug include narcolepsy and depression.

Methylphenidate (Ritalin)
Metal-phoenix
Methylphenidate is a commonly prescribed drug used to treat ADHD and ADD and is for improving concentration and focus. Off label uses include combating obesity, lethargy, and depression.

Mechanism of Action

Increased Norepinephrine
Up-arrow North-epi-pen
These drugs cause stimulatory effects in the patient by increasing presynaptic vesicle release of catecholamines, one of them being norepinephrine.

Increased Dopamine
Up-arrow Doberman
These drugs increase dopamine by inducing the release of catecholamine-containing storage vesicles. Dopamine's bioavailability is also increased by blocking its reuptake with these drugs.

Indications

Attention Deficit Hyperactivity Disorder (ADHD)
AD-HeaD with ADHD
Symptoms of ADHD may be temporarily controlled with CNS stimulants for approximately three years before tolerance develops. CNS stimulants increase the patient's focus. By increasing the patient's level of concentration, symptoms of impulsivity, distractibility, and restlessness decrease. Because of concerns related to growth suppression in children, some healthcare providers recommend “drug holidays” on weekends and in the summer to allow the child to catch up on growth.

Obesity
Obese
CNS stimulants affect the hypothalamus and cause appetite suppression. Patients with obesity may lose their appetite and experience weight loss when given this medication. Because CNS stimulants have a high risk for abuse, they are used "off label" for obesity treatment, and this is not an FDA approved indication for CNS stimulant use.

Sign up for FREE at picmonic.com

Narcolepsy

Nacho-leopard

Narcolepsy is characterized by excessive sleepiness and frequent daytime sleep attacks. Amphetamines activate the CNS and cause feelings of wakefulness and alertness to counteract feelings of sleepiness.

Sign up for FREE at picmonic.com