# Medication use
# In the treatment of ADHD

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Objectives

- Deciding if medication is the right choice
- Overview of different types of medication and how they work
- Effectiveness and adverse reactions
- Commonly asked questions

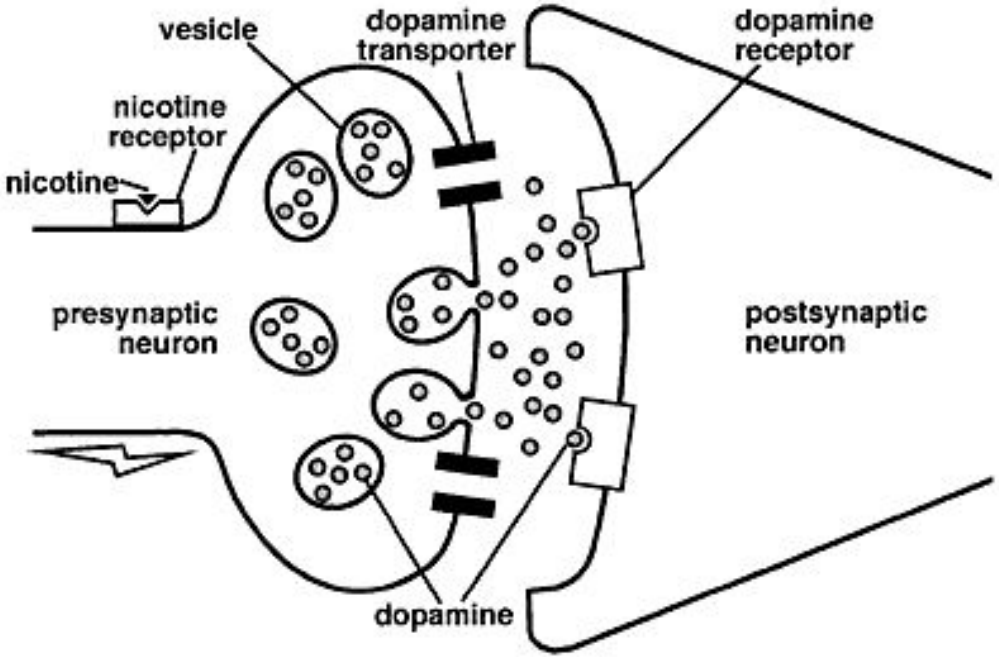
# Is medication the right choice?

- Discussion starts with your provider
- Risk vs benefit
- Studies show that ADHD medication can be very effective at helping children pay attention and concentrate better [3]
- Finding the right medication, where do you start?

# How do ADHD medications work?

- There are two main neurotransmitters thought to play a role in ADHD [4]
  - Dopamine
  - Norepinephrine
- An imbalance in these neurotransmitters may cause symptoms of ADHD
- ADHD meds can help restore this imbalance

# Presynaptic terminal[4]



# Types of medication

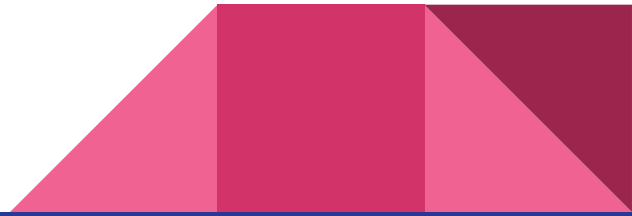
- Stimulants
  - Methylphenidate (Ritalin, Concerta, Metadate)
  - Amphetamines (Adderall, Dexedrine, Vyvanse)
- Non-stimulants
  - Atomoxetine (Strattera)
  - Clonidine and guanfacine (Kapvay and Intuniv)

# How do you find the right medication?

- Stimulants are considered first-line agents in the treatment of ADHD based on efficacy and safety [1]
- Different patients will respond differently to the same medication
- In about half of all cases, patients not responding to one stimulant may respond to another [1]
- Start low and go slow

# How do you find the right medication?

- Dosing frequency and duration
- Dosage form and ability to swallow pills
- Cost and insurance coverage
- Non-stimulants as an option



# Adverse reactions

Stimulants and atomoxetine

- Decreased appetite, poor growth, weight loss
- Decline in mood, irritability, anxiety
- Sleep disturbances, jitteriness
- Tics
- Increased heart rate, increased blood pressure, headache, dizzy
- Psychosis, suicidal thinking [2]

# Adverse reactions

Clonidine and guanfacine

- Sedation
- Depression
- Slow heart rate, possibly low blood pressure
- Headache [2]

# How do we know it’s effective

- Better focus
- Less impulsive
- Better control of thoughts
- Sleeping well
- Improved memory
- Attention to detail

# Concerns

- Stimulants are classified as CII-what does this mean?
  - Addiction and dependency
  - Diversion
- Side effects
- Long term use
- Treating ADHD with other coexisting conditions such as anxiety or depression

# Summary

- ADHD medications have proven to be an effective part of treatment
- Start low and go slow
- Finding the right medication may take time
- Be informed, ask the questions, and monitor response

# References


1. Clinical Resource, Comparison of ADHD Medications. Pharmacist's Letter/Prescriber's Letter. May 2019.
2. Clinical Resource, Pharmacology of drugs used to treat attention deficit hyperactivity disorder in children and adolescents. Uptodate August 2019.
3. Clinical Resource, Patient education: Medication for attention deficit hyperactivity disorder (ADHD) in children (the Basics). Uptodate August 2019.
4. Fausner pages.stolaf.edu. The neurological biochemistry behind ADHD. Explaining ADD inside and outside of academics. April 2015