Treating Attention Deficit Hyperactivity Disorder

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What Helps?

- Medication
- Behavior Modification
- Point of Performance Reward
- Parent Training
- Teacher Training
- Novelty
- Developmental Phenomenon











Medications

- · When do you recommend medication?
- How do you decide which medication to prescribe?
- What do you say to the parent about medication?

 How do you talk to the child about medication?









Methylphenidates Block dopamine & norepinephrine reuptake The Daytrana transdermal delivery system

Outside backing:
The layer that shows after you apply the patch

Adhesive with medicine:
Sticks to the skin to deliver the medicine

Protective liner:
Removed when you apply the patch

Long Acting
Intermediate Acting
Short Acting











Methylphenidates **Focalin** dexmethylphenidate 6 & up 2-5 hrs Focalin XR dexmethylphenidate 6 & up SODAS -sprinkle 8 hrs 50% - 50% methylphenidate 6 & up Metadate ER (extended release) 6-8 hrs Metadate CD methylphenidate 6 & up 30%-70% Beads - sprinkle (extended release) Methylin methylphenidate 6 & up chewable (oral solution/chewables) Methylin ER methylphenidate 6 & up (extended release) 6 & up Ritalin methylphenidate tablets 4-5 hrs Ritalin SR methylphenidate must swallow 8 hrs 6 & up (sustained release) Ritalin LA methylphenidate 50% -50% SODAS-sprinkle 8 hrs 6 & up (long acting) Quillivant XR methylphenidate HCL 5mg/ml suspension 12 hrs 6 & up 8 hrs Quillichew ER methylphenidate HCL Chewable tabs 6 & up methylphenidate hcl Oros/must swallow 10-12hrs Concerta 6 & up 22% - 78% (long acting) methylphenidate 2 hrs before Daytrana 6 & up patch 10 hrs (patch)









Amphetamine Salts/d,l-amphetamines

 - block dopamine & norepinephrine reuptake by competitive inhibition of dopamine at dopamine binding sites

 - displace/release dopamine and norepinephrine from pre-synaptic









Amphetamine Salts Swallow tablet Adderall Amphetamine mixed 3 & up 4-6 hrs salts Evekeo Swallow tablet 3-5 hrs **Amphetamine** 3 &up sulfate Adderall XR amphetamine 6 & up 50% -50% Beads -sprinkle 10-13 hrs (extended release) Adzenys XR ODT Amphetamine (ER) 6 & up Dissolvable 8 hrs 50% - 50% Mydayis Mixed salts of single 13 & older 3 types of beads Capsule/beads Up to 16 hrs amphetamine

Decreased Appetite
Insomnia
Headache
Increased Heart Rate
Growth?









Vyvanse

Lisdexamfetamine

- Pro drug of dextroamphetamine
- Must be metabolized to become active
 - lighter impact amphetamine
- Dissolvable and Chewable
- Harder to abuse...











Side Effects?

- Sleep
- · Appetite
- · Heart Rate?
- · Growth?











39% respond equally well to Methylphenidate or Amphetamines

26% respond better to Methylphenidates

35% respond better to d-amphetamines

Greenhill, 1996

Non Stimulants

Atomoxetine

Gaunfacine
Clonidine











- If we know there are interventions that help....why do 90% of children and teens diagnosed with ADHD at some point significantly struggle in school?
- Medication doesn't address all the symptoms...and they "wear off"
- Behavior Modification-labor intense, tracking behaviors takes time, delivering reward at point of performance is challenging, systems lack novelty
- Understanding Time- if it's not due today...it's not a problem, there's plenty of time, living in the moment









What Helps?

Child

- Medication Physical Activity Diet? -Social Opportunities
- Encourage strengths and interests Novelty

Parent Support & Strategies

- ADHD Education Support Group
- Behavior Modification with Point of Performance Reward
- Developmental Considerations

School Strategies

- Identify Learning Problems
- Home School Communications #1 Factor in School Success
- Organizational Strategies







