Minds Matter
Ohio Psychotropic Medication Quality Improvement Collaborative

ADHD SIDE EFFECTS AND INTERVENTION CHART

COMMON SIDE EFFECTS	POTENTIAL INTERVENTIONS
Significant weight loss or failure to gain weight and/or decreased appetite	• Reduce, change, or discontinue medication. • Administer medication with meals (big breakfast before meds). • Improve caloric intake with nutritious, high-caloric drinks/snacks. • Planned bedtime snack. • "Medication holiday" (discontinue medication on weekends/vacations). • Cyproheptadine has been shown to stimulate weight gain.
Sleep disruption—difficultly falling or staying asleep	• Promotion of bedtime ritual/routine and good sleep hygiene. • Reduce stimulant dosage, especially afternoon dosages of short-acting stimulants. • Assess for rebound effect (see below). • Low doses of sleep aid medications (such as melatonin) if alteration in dose or administration schedule is ineffective. • Assess need for consult to determine presence of sleep disorder.
Rebound effect (increase in hyperactivity/impulsivity in the evening when the stimulant is no longer effective)	• Switch to or increase dose of long-acting medication or add a short-acting medication during rebound period. • Overlap stimulant preparations to cover the "rebound" period. • Add a non-stimulant to regimen to smooth out effects. • Psychotherapeutic intervention to gain assistance managing these behaviors when the medication wears off.
Headache	• Dose adjustment or change in medication. Consider use of another stimulant or a non-stimulant medication. • Encourage adequate fluid intake/hydration. • If using Strattera, splitting the dosage is often effective.
Stomachache	• Administer dose during or after meals. • Discourage taking medication on an empty stomach. • Discuss possibility of providing the child with smaller, more frequent meals to see if that reduces stomachaches/nausea. • Dose adjustment or change in medication.
Dizziness/Lightheadedness	• Check pulse and blood pressure. • Encourage adequate fluid intake/hydration. • If symptoms associated with peak stimulant effect, consider use of long-acting preparation.
New emotional and/or behavioral symptoms such as anxiety, affective blunting, depressed mood, or irritability.	• Determine if irritability occurs at peak drug effect or if associated with rebound. If related to peak effect, consider reducing stimulant dose, switching to long-acting stimulant, or switching to a different stimulant or non-stimulant treatment. If related to rebound, consider low sensory environment to offset and see suggestions above.
UNCOMMON, BUT POTENTIALLY SERIOUS SIDE EFFECTS	**POTENTIAL INTERVENTIONS**
Motor tics/Vocal tics	• Determine the relationship between tics and stimulant use, including time of onset and dose-response relationships. • If tics resolve after first 7 to 10 days, it may be reasonable to review informed consent with patient and family and continue medication. • Other options include switching to a different stimulant or non-stimulant medication. • Use of an alternative stimulant or a non-stimulant medication. • Combined therapy of stimulant with an alpha agonist.

ADHD SIDE EFFECTS AND INTERVENTION CHART

Uncommon, But Potentially Serious Side Effects	Potential Interventions
Cardiac Events • Increase in heart rate and/or blood pressure • Palpitations/Rapid or irregular heartbeat • Cardiac arrhythmias are rare, but sudden death has been reported in association with stimulants, most notably mixed amphetamine salts.	• Modify, change, or discontinue medication. • Currently, there is no evidence for the need for routine cardiac evaluation such as electrocardiography or echocardiography; however, children with a history of pre-existing heart disease or symptoms suggestive of syncope and cardiovascular disease should be managed carefully. • The American Academy of Pediatrics recommends assessment of all children before initiating ADHD medications with a targeted cardiac history, including cardiac disease, palpitations, syncope, seizures, family history of sudden death, hypertrophic cardiomyopathy, and long QT syndrome. Positive findings would require additional evaluation and potential consultation with a pediatric cardiologist prior to stimulant medications.
Skin Rash/Itching/Hives	• Modify, change, or discontinue medication. • Most likely if using Daytrana patch. Vary application sites and be sure to remove at 9 hours.
Manic/Hypomanic symptoms (excessive energy, elevated mood, grandiose thoughts, euphoria or irritability, and a decreased need for sleep)	• Modify, change, or discontinue medication. • Assess family history of bipolar disorder. • If comorbid ADHD and bipolar disorder, prioritize mood stabilization before ADHD treatment.
Psychosis (auditory, visual, and tactile hallucinations [i.e., hearing, seeing, or feeling things that are not there] and/or delusions [e.g., paranoia])	• Modify, change, or discontinue medication. • Assess for comorbid psychotic disorder. Stimulants should not be prescribed to psychotic patients.
Jaundice (yellow skin or eyes, dark urine, and/or pale stools)	• Can indicate liver inflammation (hepatitis) caused by medication. This rare reaction is likely a concern only with Strattera. • Change or discontinue medication.
Seizure/Convulsion	• Consult with a specialist.
Rare side effects include extreme mood lability, increased aggression, emotional distress, or suicidal thoughts or behaviors	• Assess need for referral or emergency evaluation. • Change or discontinue medication.

Sources: 1. ADHD Medication Telephone Care Management Manual by John V. Campo, M.D., Jack Stevens, Ph.D., Kelly Kelleher, M.D., and L. Eugene Arnold, M.D.
2. Pediatric Psychiatry Network. Attention Deficit Hyperactivity Disorder and Primary Care.

Notes: This resource is for reference purposes only and should not be used to replace medical information from prescribing health care professionals or pharmacies.