Attention-Deficit / Hyperactivity Disorder

Michelle Marcy Barnes, MD

If I have ever made any valuable discoveries, it has been owing more to patient attention, than to any other talent.

— Isaac Newton

**Learning Objectives:**
1. Understand the diagnostic criteria for attention-deficit/hyperactivity disorder (ADHD) and the use of ADHD-specific rating scales
2. Learn how to guide parents in advocating for their children with special needs
3. Utilize appropriate treatment regimens for ADHD and understand the potential side effects of those regimens
4. Develop the skills to diagnose and manage most patients with ADHD

**Primary References:**

**CASE ONE:**

Noah Atenshun, a 7-year-old boy, comes to your clinic with his parents who are concerned about his behavior. Mrs. Atenshun reports that he is “out of control.” He will not sit still long enough to eat dinner with the family (unlike his 2-year-old sister, Maura), and he is always running around the house tormenting Maura and his mom. When his dad took him to see The Incredibles 2, Noah ran to the front of the ticket line, and he talked during the entire movie; that is when he wasn’t skipping around the theater. Noah’s parents are exhausted, and they don’t know what to do. “Help us!”

1. What symptoms does Noah have that point to ADHD? What other information do you need to make the diagnosis?

**CASE continued:**

Noah’s parents explain that Noah’s 2nd grade teacher emails them weekly to report that Noah disrupts class. He gets up to use the restroom multiple times during reading group every day, and he interrupts the other students when they are answering questions without raising his hand. The other students get angry with Noah because he cuts in front of them in the lunch line, and he fidgets during spelling tests. Last summer, Noah’s camp counselor reported that he didn’t share well and that he always hogged the ball in the camp soccer games. Noah’s parents had hoped that his behavior would improve after he turned 7 last month, but it seems to be getting worse.
2. How can you gather information from “more than one setting” as outlined in the DSM criteria?

3. What other diagnoses do you have to consider in the differential diagnosis? What further testing would you include as part of your work-up?

4. How would you approach Noah’s treatment with his parents and with the school?

5. If you choose to treat him medically, what medication would you start with? What side effects would you warn his parents about?
CASE continued:

Noah develops intolerable side effects on methylphenidate, and his symptoms are still significant.

6. What can you do now?

CASE continued:

After speaking with Noah’s teacher, you adjust the medication regimen, and Noah’s behavior improves dramatically over the next few months. One morning, his mom calls you frantically about a story she saw on the news about “a boy who died because of his ADHD medicine.”

7. What is the controversy regarding medications used to treat ADHD? What cardiac risk is there to initiation of treatment for ADHD?

CASE continued:

Mrs. Atenshun comes to see you 2 years later, this time about Noah’s now 4-year-old sister Maura and his 15-year-old sister Louisa. Both Maura’s and Louisa’s teachers have expressed some concern that they too might have ADHD.

8. What are the unique diagnostic and management issues with ADHD in preschoolers and adolescents?
Additional References:
Resources:
1. Information for families from AAP. http://www.aap.org/healthtopics/adhd.cfm
2. Medication safety information from AAP. http://www.aap.org/family/safetypillsadhd.htm